

## **Supplementary Information**

### **Constraints on the behavior of trace elements in the actively-forming TAG deposit, Mid-Atlantic Ridge, based on LA-ICP-MS analyses of pyrite**

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#### **Supplementary Tables:**

Table A1: Pearson correlation matrices and additional annotations for bulk geochemistry, and LA-ICP-MS data for pyrite, marcasite, sphalerite, and chalcopyrite

Table B1: Major element EMPA analyses for sulfides from the TAG deposit

Table C1: All trace element LA-ICP-MS analyses for sulfides from the TAG deposit

Table D1: Calculated proportions of trace elements in each pyrite type as illustrated in Figure 15

#### **Supplementary Figures:**

Figure A1: Box and whisker plots comparing ranges in trace element concentrations from LA-ICP-MS for sub-seafloor pyrite samples (this study), surface pyrite samples from TAG, and other basalt-hosted MOR massive sulfide deposits

**Table A1.1.** Pearson correlation coefficients calculated on log-transformed ODP Leg 158 bulk geochemical data

No. analyses	Element	Fe <sup>1,4</sup>	Zn <sup>1,4</sup>	Cd <sup>2,4</sup>	Ga <sup>1</sup>	Ge <sup>4</sup>	In <sup>2,4</sup>	As <sup>3,4</sup>	Sb <sup>3</sup>	Ag <sup>2,4</sup>	Pb <sup>2,4</sup>	Tl <sup>2</sup>	Mo <sup>2,4</sup>	Mn <sup>1,4</sup>	Au <sup>3</sup>	Ni <sup>1</sup>	V <sup>1</sup>	U <sup>2</sup>	Co <sup>3,4</sup>	Se <sup>3,4</sup>	Cu <sup>1,4</sup>	S <sup>4,5</sup>	Ca <sup>1,4</sup>	SiO <sub>2</sub> <sup>1,4</sup>	
137	Fe	1																							
112	Zn	0.01	1																						
160	Cd	-0.08	0.94	1																					
65	Ga	-0.28	0.50	0.45	1																				
71	Ge	0.13	0.42	0.66	-0.07	1																			
137	In	-0.10	0.39	0.63	0.45	0.42	1																		
160	As	0.54	0.16	0.19	0.12	0.26	0.21	1																	
89	Sb	0.04	0.46	0.38	0.87	-0.09	0.04	0.51	1																
137	Ag	-0.08	0.60	0.78	0.21	0.32	0.88	0.20	0.20	1															
167	Pb	0.02	0.72	0.66	0.80	0.58	0.11	0.37	0.83	0.29	1														
65	Tl	0.30	0.70	0.53	0.43	-0.09	-0.09	0.13	0.33	0.05	0.64	1													
160	Mo	0.66	0.23	0.11	0.03	0.20	-0.02	0.33	0.08	-0.04	0.14	0.45	1												
88	Mn	-0.17	0.05	0.08	0.39	-0.02	0.05	0.19	0.40	-0.06	0.35	0.01	-0.17	1											
95	Au	-0.31	0.26	0.29	0.77	-0.09	0.15	0.20	0.77	0.17	0.59	0.08	-0.13	0.34	1										
89	Ni	-0.36	-0.08	-0.09	0.24	-0.03	-0.07	-0.24	-0.09	-0.03	-0.11	-0.10	-0.30	0.34	-0.06	1									
89	V	0.41	0.11	0.11	0.67	0.02	0.02	0.18	0.65	0.13	0.47	-0.06	-0.24	0.64	0.50	0.57	1								
65	U	0.29	-0.27	-0.28	0.06	-0.13	-0.11	0.23	0.17	-0.19	-0.03	-0.13	0.33	0.15	0.16	0.03	0.23	1							
137	Co	0.70	-0.56	-0.61	-0.47	-0.15	-0.31	-0.18	-0.41	-0.40	-0.50	-0.21	0.30	-0.31	-0.39	-0.23	-0.34	0.34	1						
137	Se	0.36	-0.36	-0.37	-0.31	0.06	-0.15	0.11	-0.20	-0.22	-0.33	-0.17	0.28	-0.26	-0.22	-0.20	-0.23	0.15	0.56	1					
153	Cu	0.09	0.02	0.18	0.01	-0.01	0.42	0.23	-0.15	0.25	-0.04	-0.14	0.24	-0.04	-0.11	-0.17	-0.19	0.01	-0.07	0.65	1				
161	S	0.99	-0.08	-0.17	-0.10	-0.12	-0.1	0.52	-0.39	-0.14	-0.27	0.23	0.81	-0.41	-0.50	-0.38	-0.55	0.12	0.67	0.37	0.24	1			
161	Ca	-0.09	-0.24	-0.25	-0.24	-0.14	-0.11	-0.17	-0.23	-0.13	-0.27	-0.16	-0.12	-0.21	-0.19	-0.12	-0.18	-0.18	0.05	0.09	0.06	0.23	1		
161	SiO <sub>2</sub>	-0.79	0.60	0.13	0.21	-0.13	-0.02	-0.39	0.12	0.09	0.08	-0.25	-0.14	0.17	0.38	0.18	0.19	-0.20	-0.30	-0.37	-0.41	-0.74	-0.31	1	

Low-T Fe-sulfides  
(Py II, Py V, Py VI, mc)

Higher-T pyrite  
(Py I, Py III, Py IV)

Sphalerite

Chalcopyrite

Silicification

Clays?

Low-T Fe-sulfides  
(Py II, Py V, Py VI, mc)

Higher-T pyrite  
(Py I, Py III, Py IV)

Sphalerite

Chalcopyrite

Silicification

Clays?

**Table A1.2.** Pearson correlation coefficients for TAG pyrite calculated on log-transformed LA-ICP-MS data

No. analyses	Element	Zn	Cd	Ga	In	Te	Au	W	As	Mn	V	U	Ge	Ag	Pb	Sb	Mo	Tl	Ni	Co	Se	Bi	Cu	Sn
183	Zn	1																						
79	Cd	0.70	1																					
82	Ga	0.30	0.59	1																				
70	In	0.26	0.44	0.57	1																			
76	Te	0.14	0.20	0.31	0.62	1																		
85	Au	0.40	0.43	0.40	0.70	0.39	1																	
63	W	0.04	-0.20	0.33	0.65	0.13	0.16	1																
239	As	0.42	0.48	0.39	0.32	-0.15	0.37	0.30	1															
223	Mn	0.64	0.54	0.41	0.15	-0.02	0.43	0.20	0.36	1														
163	V	0.56	0.48	0.52	0.28	-0.10	0.24	0.25	0.33	0.52	1													
164	U	0.32	0.49	0.40	0.30	0.26	0.22	0.00	0.27	0.25	0.42	1												
80	Ge	0.51	0.35	0.38	0.66	0.39	0.63	0.48	0.38	0.35	0.33	-0.02	1											
155	Ag	0.50	0.44	0.44	0.29	-0.15	0.42	0.10	0.39	0.48	0.33	0.16	0.41	1										
229	Pb	0.53	0.55	0.44	0.14	-0.24	0.33	0.09	0.58	0.49	0.44	0.27	0.20	0.65	1									
163	Sb	0.49	0.51	0.55	0.08	-0.06	0.39	0.18	0.65	0.57	0.38	0.24	0.57	0.62	0.68	1								
220	Mo	0.53	0.52	0.46	0.15	-0.02	0.33	0.13	0.47	0.58	0.52	0.22	0.34	0.47	0.57	0.51	1							
171	Tl	0.57	0.30	0.58	0.20	-0.02	0.11	0.19	0.38	0.69	0.51	0.24	0.29	0.52	0.64	0.51	0.71	1						
101	Ni	-0.07	-0.01	-0.04	0.23	-0.17	0.34	0.02	-0.15	-0.04	0.23	0.02	0.39	-0.24	-0.22	0.01	-0.19	-0.17	1					
241	Co	-0.27	-0.06	-0.09	-0.03	-0.48	-0.20	-0.17	-0.05	-0.41	-0.13	-0.04	0.04	-0.42	-0.22	-0.25	-0.20	-0.48	0.21	1				
144	Se	-0.25	0.08	-0.02	0.13	-0.23	-0.02	0.02	-0.06	-0.05	-0.23	-0.24	0.04	-0.08	-0.03	-0.26	-0.21	-0.23	-0.03	0.47	1			
158	Bi	0.07	-0.02	-0.04	0.35	-0.03	0.21	0.20	0.25	-0.01	0.19	0.12	0.12	0.16	0.18	0.07	0.14	-0.03	0.33	0.30	0.26	1		
252	Cu	0.19	0.27	0.20	0.10	0.28	0.05	-0.11	0.40	0.16	0.10	0.24	0.22	0.30	0.31	0.28	0.30	0.28	-0.37	0.06	-0.21	0.04	1	
72	Sn	0.19	0.22	0.33	0.63	0.27	0.28	0.21	0.22	0.10	0.15	-0.02	0.81	0.10	0.09	0.21	0.22	0.27	0.51	0.04	-0.08	0.09	0.26	1

Py II

Py VI

Py V

Py I only

Py III, Py IV

**Table A1.3.** Pearson correlation coefficients calculated on log-transformed LA-ICP-MS data for marcasite

No. analyses	Element	Zn	Cd	Mn	Ga	Ge	In	Au	As	Sb	Ag	Pb	Tl	Mo	Ni	W	V	Cr	Te	Sn	Cu	Co	Se	Bi
48	Zn	1																						
25	Cd	0.15	1																					
28	Mn	-0.27	-0.03	1																				
47	Ga	0.03	0.21	0.01	1																			
23	Ge	-	0.25	0.18	0.20	1																		
50	In	0.33	<b>0.49</b>	-0.19	0.25	-0.05	1																	
12	Au	-0.04	-0.04	-0.03	-0.06	-0.15	-0.05	1																
11	As	-0.03	-0.13	-0.08	-0.10	-0.08	-0.05	-0.16	1															
13	Sb	-0.14	-0.14	-0.21	0.15	-0.08	-	-0.11	0.11	1														
45	Ag	0.14	0.31	-0.21	-0.01	-0.25	0.32	-0.04	-0.04	0.07	1													
32	Pb	0.19	-0.02	-0.08	-0.02	-0.14	0.17	-0.07	<b>0.55</b>	0.12	0.14	1												
8	Tl	0.04	-0.10	-	-0.08	-0.09	-0.06	-0.03	<b>0.61</b>	-	-0.02	<b>0.90</b>	1											
21	Mo	-0.05	-0.12	-0.05	-0.08	0.05	-0.11	-0.05	0.26	0.08	0.04	<b>0.56</b>	<b>0.66</b>	1										
10	Ni	0.14	-0.06	-0.14	-0.15	-0.11	0.06	-0.12	<b>0.41</b>	0.22	0.09	0.02	-0.06	-0.19	1									
5	W	0.07	<b>0.4</b>	-0.19	-0.08	0.14	0.07	0.17	-0.05	-0.08	-0.05	-0.05	-0.02	-0.10	-0.11	1								
29	V	0.03	0.16	-0.01	-0.05	-0.09	0.05	-0.08	0.09	0.05	<b>0.77</b>	0.19	0.19	0.27	-0.10	-0.03	1							
21	U	-0.06	-0.12	-0.15	0.18	-0.11	0.07	-0.10	0.27	<b>0.79</b>	0.07	0.14	-0.01	-0.04	0.09	-0.06	0.10	<b>0.68</b>						
6	Te	0.02	0.15	-0.23	0.05	-0.05	0.08	-0.13	0.22	0.27	0.05	0.11	-0.04	-0.09	0.07	<b>0.39</b>	-0.01	<b>0.38</b>	1					
50	Sn	-0.03	0.09	-0.10	-0.07	-0.13	0.15	-0.04	-0.08	-0.05	<b>0.56</b>	-0.13	-0.08	-0.01	0.01	-0.04	<b>0.52</b>	-0.07	-0.14	1				
50	Cu	0.13	0.06	-0.02	0.05	0.13	0.14	-0.11	<b>-0.44</b>	-0.01	0.07	<b>-0.77</b>	<b>-0.86</b>	<b>-0.56</b>	0.16	0.11	-0.06	-0.25	0.05	0.21	1			
36	Co	-0.14	0.05	<b>0.38</b>	-0.04	-	-0.05	0.19	-0.16	-0.09	0.13	-0.12	-0.11	0.02	-0.21	-0.10	0.10	0.18	-0.16	-0.01	-0.03	1		
14	Se	-0.15	-0.02	0.04	-0.02	0.07	-0.18	0.07	-0.17	0.03	-0.16	-0.15	-0.11	0.09	-0.20	-0.14	-0.19	0.02	-0.13	-0.26	-0.04	-	1	
15	Bi	<b>0.42</b>	-	-0.04	0.09	0.11	<b>0.41</b>	-0.11	0.13	-0.12	0.02	0.35	0.10	0.01	0.12	-	-0.06	-0.11	0.18	0.04	0.12	-0.20	-0.13	1

No. analyses	Element	Fe	Zn	Cd	Mn	Ga	Ge	In	Au	As	Sb	Ag	Pb	Tl	Mo	Ni	W	V	Cr	Te	Sn	Cu	Co	Se	Bi
19	Fe	1																							
19	Zn	<b>-0.80</b>	1																						
19	Cd	0.14	-0.09	1																					
19	Mn	<b>0.64</b>	<b>-0.68</b>	-0.03	1																				
19	Ga	-0.31	0.34	<b>0.56</b>	<b>-0.49</b>	1																			
19	Ge	<b>-0.54</b>	<b>0.46</b>	0.23	<b>-0.59</b>	<b>0.70</b>	1																		
18	In	<b>-0.49</b>	<b>0.50</b>	0.16	-0.30	<b>0.60</b>	<b>0.73</b>	1																	
10	Au	0.06	<b>-0.35</b>	0.12	<b>0.48</b>	-0.16	0.12	0.02	1																
15	As	<b>-0.52</b>	<b>0.49</b>	0.17	<b>-0.51</b>	0.31	<b>0.76</b>	<b>0.46</b>	0.14	1															
19	Sb	-0.12	0.22	0.04	0.16	-0.02	0.14	-0.01	<b>0.42</b>	0.29	1														
19	Ag	-0.34	<b>0.56</b>	-0.10	<b>-0.38</b>	-0.13	0.31	0.15	-0.16	<b>0.58</b>	0.21	1													
19	Pb	-0.14	0.09	-0.01	0.30	-0.29	0.03	-0.15	<b>0.55</b>	<b>0.45</b>	<b>0.65</b>	<b>0.39</b>	1												
16	Tl	0.15	0.11	-0.12	-0.15	-0.21	0.13	-0.11	0.03	0.29	0.31	<b>0.47</b>	0.23	1											
14	Mo	0.20	-	-0.02	<b>0.48</b>	<b>-0.35</b>	<b>-0.38</b>	0.02	0.25	-0.24	0.31	0.03	0.25	<b>0.41</b>	1										
4	Ni	0.26	0.04	-0.16	0.02	-0.29	-0.10	-0.03	0.04	0.07	0.15	0.23	0.03	<b>0.83</b>	<b>0.67</b>	1									
5	W	<b>-0.40</b>	0.31	-0.19	<b>-0.38</b>	0.26	0.12	-	-0.24	-0.09	-0.16	-0.20	-0.19	-0.14	-0.24	-0.17	1								
11	V	0.31	0.07	-0.22	-	-0.29	-0.19	-0.24	-0.18	-0.01	0.21	0.31	0.06	<b>0.86</b>	<b>0.54</b>	<b>0.86</b>	-0.16	1							
11	U	0.26	-0.21	0.12	<b>0.44</b>	-0.34	-0.27	<b>-0.35</b>	0.29	-0.13	0.21	0.05	<b>0.46</b>	<b>0.47</b>	<b>0.52</b>	0.32	-0.16	<b>0.46</b>	1						
-	Te	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Sn	-	0.06	0.25	0.02	<b>0.37</b>	0.24	<b>0.58</b>	-0.18	-0.02	-0.33	-0.29	<b>-0.38</b>	-0.18	0.07	-0.07	0.01	-0.19	-0.04	-	1				
19	Cu	0.09	0.11	0.33	0.08	<b>0.46</b>	<b>0.55</b>	<b>0.47</b>	0.27	0.31	<b>0.51</b>	0.04	0.20	0.34	0.16	0.17	-0.14	0.14	0.23	-	<b>0.43</b>	1			
15	Co	<b>0.36</b>	-0.3	0.02	0.18	-0.06	-0.05	-0.03	-0.12	-0.18	<b>-0.35</b>	-0.23	-0.29	-0.10	-0.25	-0.15	-0.16	-0.07	0.12	-	<b>0.60</b>	0.21	1		
-	Se	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Bi	-0.29	0.26	-0.01	-0.19	-0.03	0.28	0.29	-0.06	0.29	-0.05	<b>0.67</b>	0.14	0.09	-0.14	-0.16	-0.16	-0.13	0.02	-	-0.13	-0.04	-0.07	-	1

**Table A1.4.** Pearson correlation coefficients calculated on log-transformed LA-ICP-MS data for sphalerite

**Table A1.5.** Pearson correlation coefficients calculated on log-transformed LA-ICP-MS data for chalcopyrite

No. analyses	Element	Zn	Cd	Mn	Ga	Ge	In	Au	As	Sb	Ag	Pb	Tl	Mo	Ni	W	V	Cr	Te	Sn	Cu	Co	Se	Bi
48	Zn	1																						
25	Cd	0.15	1																					
28	Mn	-0.27	-0.03	1																				
47	Ga	0.03	0.21	0.01	1																			
23	Ge	-	0.25	0.18	0.20	1																		
50	In	0.33	<b>0.49</b>	-0.19	0.25	-0.05	1																	
12	Au	-0.04	-0.04	-0.03	-0.06	-0.15	-0.05	1																
11	As	-0.03	-0.13	-0.08	-0.10	-0.08	-0.05	-0.16	1															
13	Sb	-0.14	-0.14	-0.21	0.15	-0.08	-	-0.11	0.11	1														
45	Ag	0.14	0.31	-0.21	-0.01	-0.25	0.32	-0.04	-0.04	0.07	1													
32	Pb	0.19	-0.02	-0.08	-0.02	-0.14	0.17	-0.07	<b>0.55</b>	0.12	0.14	1												
8	Tl	0.04	-0.10	-	-0.08	-0.09	-0.06	-0.03	<b>0.61</b>	-	-0.02	<b>0.90</b>	1											
21	Mo	-0.05	-0.12	-0.05	-0.08	0.05	-0.11	-0.05	0.26	0.08	0.04	<b>0.56</b>	<b>0.66</b>	1										
10	Ni	0.14	-0.06	-0.14	-0.15	-0.11	0.06	-0.12	<b>0.41</b>	0.22	0.09	0.02	-0.06	-0.19	1									
5	W	0.07	<b>0.4</b>	-0.19	-0.08	0.14	0.07	0.17	-0.05	-0.08	-0.05	-0.05	-0.02	-0.10	-0.11	1								
29	V	0.03	0.16	-0.01	-0.05	-0.09	0.05	-0.08	0.09	0.05	<b>0.77</b>	0.19	0.19	0.27	-0.10	-0.03	1							
21	U	-0.06	-0.12	-0.15	0.18	-0.11	0.07	-0.10	0.27	<b>0.79</b>	0.07	0.14	-0.01	-0.04	0.09	-0.06	0.10	<b>0.68</b>						
6	Te	0.02	0.15	-0.23	0.05	-0.05	0.08	-0.13	0.22	0.27	0.05	0.11	-0.04	-0.09	0.07	<b>0.39</b>	-0.01	<b>0.38</b>	1					
50	Sn	-0.03	0.09	-0.10	-0.07	-0.13	0.15	-0.04	-0.08	-0.05	<b>0.56</b>	-0.13	-0.08	-0.01	0.01	-0.04	<b>0.52</b>	-0.07	-0.14	1				
50	Cu	0.13	0.06	-0.02	0.05	0.13	0.14	-0.11	<b>-0.44</b>	-0.01	0.07	<b>-0.77</b>	<b>-0.86</b>	<b>-0.56</b>	0.16	0.11	-0.06	-0.25	0.05	0.21	1			
36	Co	-0.14	0.05	<b>0.38</b>	-0.04	-	-0.05	0.19	-0.16	-0.09	0.13	-0.12	-0.11	0.02	-0.21	-0.10	0.10	0.18	-0.16	-0.01	-0.03	1		
14	Se	-0.15	-0.02	0.04	-0.02	0.07	-0.18	0.07	-0.17	0.03	-0.16	-0.15	-0.11	0.09	-0.20	-0.14	-0.19	0.02	-0.13	-0.26	-0.04	-	1	
15	Bi	<b>0.42</b>	-	-0.04	0.09	0.11	<b>0.41</b>	-0.11	0.13	-0.12	0.02	0.35	0.10	0.01	0.12	-	-0.06	-0.11	0.18	0.04	0.12	-0.20	-0.13	1

**Table A1.** Pearson correlation coefficients calculated on log-transformed data for element pairs from the TAG Hydrothermal Mound. **A1.1)** Bulk geochemical data from Fouquet et al. (1998) and Hannington et al. (1998b). Number of elements (components) = 23. Superscripts indicate the method of analysis: 1) ICP-ES, 2) XRF, 3) Leco, 4) INAA, 5) ICP-MS. S1. **A1.2)** LA-ICP-MS data for pyrite. Groupings of elements by pyrite type are highlighted and discussed in section 5.1. Number of elements = 23. **A1.3)** LA-ICP-MS data for marcasite. **A1.4)** LA-ICP-MS data for sphalerite. Number of elements = 22. **A3.5)** LA-ICP-MS data for chalcopyrite. Number of elements = 23. Correlations significant at the 99% confidence level are in bold and highlighted in dark gray; correlations at the 95-99% confidence level are in bold and highlighted in light gray. The significance thresholds (or critical values) are for n-2 degrees of freedom and a one-tailed t-test. ‘-’ indicates no data. Numbers of analyses for each element are indicated in the left column.

Table B1: Major element EMPA analyses for sulfides from the TAG deposit (data in wt.%)

1 of 7

No	Sample ID	Mineral	mbsf	TAG Area	Section	Fe	S	Zn	Cu	Total
1	5-5	py	15.6	TAG-4	957M-3R-1-30	46.40	53.95	bdl	0.027	100.38
2	6-6	py	15.6	TAG-4	957M-3R-1-30	46.62	53.52	bdl	bdl	100.14
3	7-7	py	15.6	TAG-4	957M-3R-1-30	46.46	53.86	0.026	0.002	100.35
4	7-7	py	15.6	TAG-4	957M-3R-1-30	46.46	53.86	0.026	0.002	100.35
5	8-8	py	15.6	TAG-4	957M-3R-1-30	46.61	53.88	0.003	0.028	100.52
6	9-9	py	15.6	TAG-4	957M-3R-1-30	46.33	53.84	0.000	0.050	100.22
7	10-10	py	15.6	TAG-4	957M-3R-1-30	45.68	53.78	0.008	bdl	99.47
8	12-12	py	15.6	TAG-4	957M-3R-1-30	46.42	54.08	bdl	0.036	100.54
9	13-13	py	15.6	TAG-4	957M-3R-1-30	45.76	53.94	0.030	0.081	99.81
10	16-16	py	15.6	TAG-4	957M-3R-1-30	46.11	53.51	bdl	bdl	99.62
11	17-17	py	15.6	TAG-4	957M-3R-1-30	46.22	53.61	bdl	0.083	99.91
12	20-20	py	15.6	TAG-4	957M-3R-1-30	46.07	53.69	bdl	0.033	99.79
13	21-21	py	15.6	TAG-4	957M-3R-1-30	46.47	53.19	0.053	0.086	99.80
14	22-22	py	15.6	TAG-4	957M-3R-1-30	46.62	53.98	0.020	0.014	100.63
15	23-23	py	15.6	TAG-4	957M-3R-1-30	46.55	53.21	0.017	0.027	99.80
16	24-24	py	15.6	TAG-4	957M-3R-1-30	46.34	53.08	bdl	bdl	99.42
17	25-25	py	15.6	TAG-4	957M-3R-1-30	46.12	53.19	0.049	0.174	99.53
18	26-26	py	15.6	TAG-4	957M-3R-1-30	46.63	53.47	0.005	0.047	100.15
19	27-27	py	15.6	TAG-4	957M-3R-1-30	46.66	53.83	bdl	0.067	100.56
20	28-28	py	15.6	TAG-4	957M-3R-1-30	46.79	53.91	0.014	0.029	100.74
21	29-29	py	15.6	TAG-4	957M-3R-1-30	46.67	53.92	0.023	bdl	100.61
22	30-30	py	15.6	TAG-4	957M-3R-1-30	46.67	53.83	0.003	bdl	100.50
23	33-33	cpy	15.6	TAG-4	957M-3R-1-30	30.17	35.15	bdl	34.89	100.21
24	34-34	cpy	15.6	TAG-4	957M-3R-1-30	30.10	35.11	bdl	34.39	99.60
25	35-35	cpy	15.6	TAG-4	957M-3R-1-30	30.20	35.21	bdl	34.43	99.84
26	36-36	cpy	15.6	TAG-4	957M-3R-1-30	30.20	35.00	bdl	34.59	99.79
27	37-37	cpy	15.6	TAG-4	957M-3R-1-30	30.12	35.06	bdl	34.63	99.81
28	38-38	cpy	15.6	TAG-4	957M-3R-1-30	30.09	34.91	bdl	34.60	99.60
29	39-39	py	15.6	TAG-4	957M-3R-1-30	46.52	53.81	bdl	0.053	100.38
30	40-40	py	15.6	TAG-4	957M-3R-1-30	46.45	53.76	bdl	0.051	100.26
31	41-41	py	15.6	TAG-4	957M-3R-1-30	46.39	53.64	bdl	0.002	100.03
32	42-42	py	15.6	TAG-4	957M-3R-1-30	46.46	53.71	bdl	0.023	100.19
33	43-43	py	15.6	TAG-4	957M-3R-1-30	46.61	53.65	bdl	0.025	100.29
34	47-47	py	15.6	TAG-4	957M-3R-1-30	46.47	54.00	bdl	0.040	100.51
35	48-48	py	15.6	TAG-4	957M-3R-1-30	46.60	54.19	0.020	bdl	100.81
36	49-49	py	15.6	TAG-4	957M-3R-1-30	46.59	54.15	bdl	0.023	100.76
37	50-50	py	15.6	TAG-4	957M-3R-1-30	46.62	54.12	0.002	0.037	100.78
38	51-51	py	15.6	TAG-4	957M-3R-1-30	46.50	54.36	bdl	bdl	100.86
39	52-52	py	15.6	TAG-4	957M-3R-1-30	46.31	53.95	0.006	0.001	100.27
40	53-53	py	15.6	TAG-4	957M-3R-1-30	46.44	54.18	0.005	0.012	100.64
41	54-54	py	15.6	TAG-4	957M-3R-1-30	46.39	54.08	0.002	0.005	100.48
42	55-55	py	15.6	TAG-4	957M-3R-1-30	46.79	54.20	bdl	bdl	100.99
43	56-56	py	40.1	TAG-5	957P-9R-1-1	46.66	54.07	0.010	0.029	100.77
44	57-57	py	40.1	TAG-5	957P-9R-1-1	46.69	54.00	0.031	0.016	100.74
45	59-59	py	40.1	TAG-5	957P-9R-1-1	46.64	54.08	bdl	0.029	100.75
46	60-60	py	40.1	TAG-5	957P-9R-1-1	46.45	54.35	bdl	0.016	100.82
47	62-62	py	40.1	TAG-5	957P-9R-1-1	45.62	54.09	bdl	0.019	99.73
48	63-63	py	40.1	TAG-5	957P-9R-1-1	45.63	54.29	0.009	0.021	99.95
49	64-64	py	40.1	TAG-5	957P-9R-1-1	45.99	54.36	bdl	0.026	100.38
50	65-65	py	40.1	TAG-5	957P-9R-1-1	45.90	53.96	0.015	0.022	99.90
51	66-66	py	40.1	TAG-5	957P-9R-1-1	46.60	54.19	bdl	0.023	100.81
52	67-67	py	40.1	TAG-5	957P-9R-1-1	46.52	54.34	bdl	bdl	100.86
53	69-69	py	40.1	TAG-5	957P-9R-1-1	46.50	54.40	0.020	0.020	100.94
54	70-70	py	40.1	TAG-5	957P-9R-1-1	46.48	54.41	0.018	0.031	100.94
55	72-72	py	40.1	TAG-5	957P-9R-1-1	46.79	54.09	bdl	0.008	100.89
56	73-73	py	40.1	TAG-5	957P-9R-1-1	46.65	54.21	bdl	bdl	100.86
57	74-74	py	40.1	TAG-5	957P-9R-1-1	46.15	54.29	0.023	0.022	100.48
58	75-75	py	40.1	TAG-5	957P-9R-1-1	46.16	54.35	0.012	0.020	100.54
59	76-76	py	40.1	TAG-5	957P-9R-1-1	46.63	54.19	bdl	0.029	100.85
60	77-77	py	40.1	TAG-5	957P-9R-1-1	46.79	54.16	0.006	0.031	100.99
61	79-79	py	40.1	TAG-5	957P-9R-1-1	46.69	54.14	0.012	bdl	100.84
62	80-80	py	40.1	TAG-5	957P-9R-1-1	46.78	54.16	0.018	0.028	100.99
63	82-82	py	40.1	TAG-5	957P-9R-1-1	46.68	54.10	bdl	0.006	100.79
64	83-83	py	40.1	TAG-5	957P-9R-1-1	46.75	54.13	bdl	0.039	100.92
65	90-90	py	40.1	TAG-5	957P-9R-1-1	46.57	54.13	bdl	0.011	100.71
66	91-91	py	40.1	TAG-5	957P-9R-1-1	46.51	54.24	0.024	bdl	100.77
67	92-92	py	40.1	TAG-5	957P-9R-1-1	46.43	54.24	bdl	bdl	100.67
68	94-94	py	40.1	TAG-5	957P-9R-1-1	46.78	54.13	0.033	0.033	100.98
69	95-95	py	40.1	TAG-5	957P-9R-1-1	46.39	54.27	0.011	0.028	100.70
70	96-96	py	40.1	TAG-5	957P-9R-1-1	46.34	53.90	bdl	0.034	100.27
71	97-97	py	40.1	TAG-5	957P-9R-1-1	46.66	54.22	bdl	0.029	100.91
72	98-98	py	40.1	TAG-5	957P-9R-1-1	46.68	54.18	bdl	0.027	100.89
73	99-99	py	40.1	TAG-5	957P-9R-1-1	46.45	54.37	0.009	0.025	100.85

Table B1: Major element EMPA analyses for sulfides from the TAG deposit (data in wt.%)

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No	Sample ID	Mineral	mbsf	TAG Area	Section	Fe	S	Zn	Cu	Total
74	100-100	py	21.32	TAG-1	957C-7N-2-1D	46.49	54.16	0.016	0.068	100.73
75	101-101	py	21.32	TAG-1	957C-7N-2-1D	46.58	54.32	bdl	0.008	100.91
76	102-102	py	21.32	TAG-1	957C-7N-2-1D	46.60	54.31	bdl	0.016	100.93
77	103-103	py	21.32	TAG-1	957C-7N-2-1D	46.66	54.29	0.012	bdl	100.96
78	104-104	py	21.32	TAG-1	957C-7N-2-1D	46.35	54.22	bdl	0.026	100.60
79	106-106	py	21.32	TAG-1	957C-7N-2-1D	46.53	54.38	0.006	0.037	100.95
80	107-107	py	21.32	TAG-1	957C-7N-2-1D	46.56	54.27	bdl	0.007	100.84
81	108-108	py	21.32	TAG-1	957C-7N-2-1D	46.64	54.31	0.002	0.026	100.98
82	112-112	py	21.32	TAG-1	957C-7N-2-1D	46.76	54.16	bdl	0.028	100.95
83	113-113	py	21.32	TAG-1	957C-7N-2-1D	46.56	53.82	bdl	0.001	100.38
84	114-114	py	21.32	TAG-1	957C-7N-2-1D	46.64	54.19	bdl	0.008	100.84
85	115-115	py	21.32	TAG-1	957C-7N-2-1D	46.62	54.27	bdl	0.026	100.92
86	116-116	py	21.32	TAG-1	957C-7N-2-1D	46.62	54.29	bdl	0.032	100.94
87	117-117	py	21.32	TAG-1	957C-7N-2-1D	46.65	54.13	bdl	0.014	100.79
88	118-118	py	21.32	TAG-1	957C-7N-2-1D	46.41	53.83	bdl	0.031	100.27
89	119-119	py	21.32	TAG-1	957C-7N-2-1D	46.45	53.36	0.002	0.028	99.84
90	120-120	py	21.32	TAG-1	957C-7N-2-1D	46.55	53.13	bdl	bdl	99.68
91	121-121	py	21.32	TAG-1	957C-7N-2-1D	46.53	53.95	0.011	0.026	100.52
92	122-122	py	21.32	TAG-1	957C-7N-2-1D	46.55	54.29	bdl	0.026	100.87
93	124-124	py	21.32	TAG-1	957C-7N-2-1D	46.57	54.19	bdl	0.050	100.81
94	128-128	py	21.32	TAG-1	957C-7N-2-1D	46.74	54.24	bdl	0.015	101.00
95	135-135	py	15.6	TAG-4	957M-3R-1-30	46.68	54.09	bdl	0.018	100.79
96	136-136	py	15.6	TAG-4	957M-3R-1-30	46.56	54.32	bdl	bdl	100.88
97	137-137	py	15.6	TAG-4	957M-3R-1-30	46.27	54.12	0.031	0.005	100.43
98	138-138	py	15.6	TAG-4	957M-3R-1-30	46.53	54.12	bdl	0.022	100.67
99	139-139	py	15.6	TAG-4	957M-3R-1-30	46.59	54.04	0.030	0.022	100.68
100	141-141	py	15.6	TAG-4	957M-3R-1-30	46.52	54.12	bdl	bdl	100.64
101	142-142	py	15.6	TAG-4	957M-3R-1-30	46.38	54.28	bdl	0.035	100.70
102	143-143	py	15.6	TAG-4	957M-3R-1-30	46.80	54.00	0.027	bdl	100.83
103	148-5	py	14.61	TAG-4	957K-3X-1-3	46.48	53.37	0.013	0.022	99.88
104	149-6	py	14.61	TAG-4	957K-3X-1-3	46.59	53.38	0.006	0.039	100.01
105	150-7	py	14.61	TAG-4	957K-3X-1-3	46.55	53.39	bdl	0.019	99.96
106	151-8	py	14.61	TAG-4	957K-3X-1-3	46.47	53.05	bdl	bdl	99.52
107	152-9	mc	14.61	TAG-4	957K-3X-1-3	46.78	53.94	0.013	0.034	100.77
108	153-10	mc	14.61	TAG-4	957K-3X-1-3	46.71	53.41	bdl	bdl	100.12
109	154-11	mc	14.61	TAG-4	957K-3X-1-3	46.66	53.63	bdl	0.020	100.31
110	155-12	mc	14.61	TAG-4	957K-3X-1-3	46.67	53.65	0.014	bdl	100.33
111	156-13	py	14.61	TAG-4	957K-3X-1-3	46.48	53.57	0.364	0.084	100.50
112	157-14	py	14.61	TAG-4	957K-3X-1-3	46.60	53.96	0.322	0.033	100.91
113	158-15	py	14.61	TAG-4	957K-3X-1-3	46.49	53.97	0.336	0.029	100.83
114	159-16	py	14.61	TAG-4	957K-3X-1-3	46.45	53.14	0.387	0.100	100.08
115	160-17	py	14.61	TAG-4	957K-3X-1-3	46.33	53.47	0.382	0.060	100.24
116	161-18	py	14.61	TAG-4	957K-3X-1-3	46.47	53.86	0.376	0.029	100.74
117	162-19	py	14.61	TAG-4	957K-3X-1-3	46.24	53.44	0.400	0.076	100.16
118	163-20	py	14.61	TAG-4	957K-3X-1-3	46.50	53.75	0.514	0.035	100.80
119	164-21	py	14.61	TAG-4	957K-3X-1-3	46.69	53.50	0.571	0.032	100.79
120	165-22	py	14.61	TAG-4	957K-3X-1-3	46.66	53.76	bdl	0.017	100.44
121	166-23	py	14.61	TAG-4	957K-3X-1-3	46.84	53.61	bdl	bdl	100.45
122	167-24	py	14.61	TAG-4	957K-3X-1-3	46.86	53.73	0.018	0.019	100.63
123	168-25	py	14.61	TAG-4	957K-3X-1-3	46.94	53.60	bdl	bdl	100.54
124	169-26	py	14.61	TAG-4	957K-3X-1-3	46.91	53.73	bdl	0.017	100.66
125	170-27	py	14.61	TAG-4	957K-3X-1-3	46.65	53.95	0.018	0.071	100.69
126	171-28	py	14.61	TAG-4	957K-3X-1-3	46.76	53.50	0.054	0.016	100.33
127	172-29	py	14.61	TAG-4	957K-3X-1-3	46.90	53.67	0.011	0.027	100.61
128	173-30	py	14.61	TAG-4	957K-3X-1-3	46.67	53.77	0.026	0.201	100.67
129	174-31	py	14.61	TAG-4	957K-3X-1-3	46.83	53.78	0.046	0.037	100.69
130	175-32	py	14.61	TAG-4	957K-3X-1-3	46.79	53.46	bdl	0.014	100.26
131	177-34	py	14.61	TAG-4	957K-3X-1-3	46.95	53.78	0.004	0.006	100.74
132	178-35	py	14.61	TAG-4	957K-3X-1-3	46.92	53.80	0.028	0.005	100.75
133	179-36	py	14.61	TAG-4	957K-3X-1-3	46.99	53.82	0.019	0.024	100.85
134	180-37	py	14.61	TAG-4	957K-3X-1-3	46.60	53.31	0.003	0.018	99.93
135	181-38	py	14.61	TAG-4	957K-3X-1-3	46.44	53.42	0.022	0.068	99.95
136	182-39	py	14.61	TAG-4	957K-3X-1-3	46.32	53.14	0.027	0.033	99.52
137	183-40	py	14.61	TAG-4	957K-3X-1-3	46.57	53.49	bdl	0.038	100.10
138	184-41	py	14.61	TAG-4	957K-3X-1-3	46.59	53.46	0.037	0.033	100.12
139	193-5	py	14.61	TAG-4	957K-3X-1-3	46.69	53.30	0.022	0.012	100.02
140	194-6	py	14.61	TAG-4	957K-3X-1-3	46.76	53.63	0.034	0.000	100.42
141	196-8	py	14.61	TAG-4	957K-3X-1-3	46.86	53.91	0.000	0.001	100.77
142	197-9	py	14.61	TAG-4	957K-3X-1-3	46.67	53.26	bdl	0.025	99.96
143	198-10	mc	14.61	TAG-4	957K-3X-1-3	46.73	54.11	0.043	0.008	100.89
144	200-12	mc	14.61	TAG-4	957K-3X-1-3	46.71	54.01	0.038	0.031	100.79
145	202-14	mc	14.61	TAG-4	957K-3X-1-3	46.83	54.07	0.029	0.026	100.96
146	203-15	py	14.61	TAG-4	957K-3X-1-3	46.68	53.81	0.134	bdl	100.62

Table B1: Major element EMPA analyses for sulfides from the TAG deposit (data in wt.%)

3 of 7

No	Sample ID	Mineral	mbsf	TAG Area	Section	Fe	S	Zn	Cu	Total
147	205-17	py	14.61	TAG-4	957K-3X-1-3	46.70	54.16	0.120	bdl	100.98
148	206-18	py	14.61	TAG-4	957K-3X-1-3	46.73	53.82	0.182	0.038	100.77
149	207-19	py	14.61	TAG-4	957K-3X-1-3	46.65	53.62	0.127	0.030	100.43
150	208-20	py	14.61	TAG-4	957K-3X-1-3	46.54	53.49	0.187	0.024	100.24
151	209-21	py	14.61	TAG-4	957K-3X-1-3	46.70	53.68	0.189	0.028	100.60
152	210-22	py	14.61	TAG-4	957K-3X-1-3	46.50	53.67	0.186	0.001	100.36
153	211-23	py	14.61	TAG-4	957K-3X-1-3	46.53	53.59	0.254	0.018	100.39
154	212-24	py	14.61	TAG-4	957K-3X-1-3	46.61	53.64	0.202	0.051	100.50
155	213-25	py	14.61	TAG-4	957K-3X-1-3	46.62	53.59	0.326	0.012	100.55
156	214-26	py	14.61	TAG-4	957K-3X-1-3	46.41	53.76	0.335	0.043	100.55
157	215-27	py	14.61	TAG-4	957K-3X-1-3	46.50	53.64	0.350	0.054	100.54
158	216-28	py	14.61	TAG-4	957K-3X-1-3	46.21	53.76	0.438	0.034	100.44
159	217-29	py	14.61	TAG-4	957K-3X-1-3	46.34	53.95	0.298	0.011	100.60
160	223-35	py	14.61	TAG-4	957K-3X-1-3	46.78	53.93	0.101	0.021	100.83
161	224-36	py	14.61	TAG-4	957K-3X-1-3	46.55	53.87	0.086	0.023	100.53
162	225-37	py	14.61	TAG-4	957K-3X-1-3	46.64	53.91	0.070	bdl	100.62
163	226-38	py	14.61	TAG-4	957K-3X-1-3	46.65	53.94	0.067	0.031	100.69
164	227-39	py	14.61	TAG-4	957K-3X-1-3	46.68	53.78	0.084	0.043	100.59
165	228-40	mc	14.61	TAG-4	957K-3X-1-3	46.60	53.94	0.065	0.037	100.64
166	229-41	mc	14.61	TAG-4	957K-3X-1-3	46.57	53.94	0.103	0.041	100.65
167	230-42	mc	14.61	TAG-4	957K-3X-1-3	46.55	53.92	0.029	bdl	100.50
168	231-43	mc	14.61	TAG-4	957K-3X-1-3	46.61	53.98	0.044	bdl	100.63
169	232-44	mc	14.61	TAG-4	957K-3X-1-3	46.50	53.99	0.081	0.010	100.58
170	233-45	py	14.61	TAG-4	957K-3X-1-3	46.77	54.13	0.015	0.006	100.92
171	234-46	py	14.61	TAG-4	957K-3X-1-3	46.60	54.15	0.053	0.022	100.83
172	236-48	py	14.61	TAG-4	957K-3X-1-3	46.68	54.09	0.055	0.009	100.83
173	237-49	py	14.61	TAG-4	957K-3X-1-3	46.55	53.88	0.033	0.007	100.47
174	238-50	py	14.61	TAG-4	957K-3X-1-3	46.44	53.97	0.507	0.015	100.93
175	239-51	py	14.61	TAG-4	957K-3X-1-3	46.16	53.52	0.550	0.019	100.25
176	241-53	py	14.61	TAG-4	957K-3X-1-3	45.90	53.32	0.528	0.047	99.79
177	242-54	py	14.61	TAG-4	957K-3X-1-3	46.57	53.91	0.278	0.080	100.84
178	245-57	py	14.61	TAG-4	957K-3X-1-3	46.45	54.03	0.400	0.007	100.89
179	246-58	py	14.61	TAG-4	957K-3X-1-3	46.40	53.90	0.528	0.001	100.83
180	247-59	py	14.61	TAG-4	957K-3X-1-3	46.60	54.03	0.344	bdl	100.97
181	258-70	sph	14.61	TAG-4	957K-3X-1-3	8.51	33.80	56.37	1.31	99.99
182	260-72	sph	14.61	TAG-4	957K-3X-1-3	10.57	33.99	54.66	0.90	100.12
183	261-73	sph	14.61	TAG-4	957K-3X-1-3	8.31	33.83	55.48	1.81	99.43
184	262-74	sph	14.61	TAG-4	957K-3X-1-3	7.03	33.85	57.09	1.85	99.82
185	263-75	sph	14.61	TAG-4	957K-3X-1-3	7.87	34.06	58.39	0.221	100.54
186	264-76	sph	14.61	TAG-4	957K-3X-1-3	8.87	34.03	57.70	0.080	100.68
187	265-77	sph	14.61	TAG-4	957K-3X-1-3	8.45	33.83	57.55	0.100	99.93
188	266-78	sph	14.61	TAG-4	957K-3X-1-3	8.90	34.01	57.51	0.094	100.51
189	267-79	sph	14.61	TAG-4	957K-3X-1-3	8.25	34.15	58.10	0.085	100.58
190	268-80	py	14.61	TAG-4	957K-3X-1-3	46.65	53.41	0.025	bdl	100.08
191	269-81	py	14.61	TAG-4	957K-3X-1-3	46.79	53.44	bdl	bdl	100.23
192	270-82	py	14.61	TAG-4	957K-3X-1-3	46.72	53.74	bdl	0.013	100.47
193	271-83	py	14.61	TAG-4	957K-3X-1-3	46.62	53.33	0.027	0.033	100.01
194	272-84	py	14.61	TAG-4	957K-3X-1-3	46.68	53.58	bdl	0.039	100.30
195	273-85	py	14.61	TAG-4	957K-3X-1-3	46.72	54.12	bdl	bdl	100.84
196	274-86	py	14.61	TAG-4	957K-3X-1-3	46.69	54.08	0.005	0.003	100.78
197	275-87	py	14.61	TAG-4	957K-3X-1-3	46.75	54.09	0.014	bdl	100.85
198	276-88	py	14.61	TAG-4	957K-3X-1-3	46.78	54.02	0.017	0.030	100.85
199	277-89	py	14.61	TAG-4	957K-3X-1-3	46.77	53.92	0.044	bdl	100.73
200	278-90	py	14.61	TAG-4	957K-3X-1-3	46.04	52.95	0.019	0.007	99.02
201	280-92	py	14.61	TAG-4	957K-3X-1-3	46.31	53.41	bdl	0.014	99.73
202	281-93	py	14.61	TAG-4	957K-3X-1-3	46.15	53.24	0.005	0.019	99.41
203	282-94	py	14.61	TAG-4	957K-3X-1-3	46.33	53.44	0.033	0.021	99.82
204	283-95	py	14.61	TAG-4	957K-3X-1-3	46.33	53.40	0.008	0.028	99.77
205	284-96	py	14.61	TAG-4	957K-3X-1-3	46.27	52.98	0.000	0.054	99.30
206	285-97	py	14.61	TAG-4	957K-3X-1-3	46.19	53.25	bdl	0.029	99.47
207	286-98	py	14.61	TAG-4	957K-3X-1-3	46.14	52.85	0.069	0.028	99.09
208	287-99	py	14.61	TAG-4	957K-3X-1-3	46.32	53.05	bdl	0.013	99.38
209	289-2	py	43.34	TAG-1	957C-15N-2-1D	46.49	53.89	bdl	0.019	100.40
210	290-3	py	43.34	TAG-1	957C-15N-2-1D	46.55	53.99	bdl	0.031	100.57
211	291-4	py	43.34	TAG-1	957C-15N-2-1D	46.43	53.99	0.043	0.124	100.59
212	292-5	py	43.34	TAG-1	957C-15N-2-1D	46.66	54.18	bdl	0.017	100.86
213	293-6	py	43.34	TAG-1	957C-15N-2-1D	46.46	54.10	bdl	0.010	100.57
214	294-7	py	43.34	TAG-1	957C-15N-2-1D	46.55	53.86	0.000	0.027	100.44
215	295-8	py	43.34	TAG-1	957C-15N-2-1D	46.51	53.73	bdl	0.052	100.29
216	296-9	py	43.34	TAG-1	957C-15N-2-1D	46.52	53.83	bdl	0.153	100.50
217	297-10	py	43.34	TAG-1	957C-15N-2-1D	46.44	53.54	bdl	0.185	100.16
218	298-11	py	43.34	TAG-1	957C-15N-2-1D	46.59	54.14	bdl	0.205	100.93
219	299-12	py	43.34	TAG-1	957C-15N-2-1D	46.31	53.93	0.003	0.023	100.27

Table B1: Major element EMPA analyses for sulfides from the TAG deposit (data in wt.%)

4 of 7

No	Sample ID	Mineral	mbsf	TAG Area	Section	Fe	S	Zn	Cu	Total
220	300-13	py	43.34	TAG-1	957C-15N-2-1D	46.22	54.03	0.021	0.039	100.31
221	301-14	py	43.34	TAG-1	957C-15N-2-1D	46.29	54.01	bdl	0.048	100.35
222	302-15	py	43.34	TAG-1	957C-15N-2-1D	46.49	54.31	bdl	0.017	100.82
223	303-16	py	43.34	TAG-1	957C-15N-2-1D	46.51	54.19	0.028	0.019	100.75
224	304-17	py	43.34	TAG-1	957C-15N-2-1D	46.43	53.76	0.017	0.051	100.26
225	305-18	py	43.34	TAG-1	957C-15N-2-1D	46.71	54.03	0.008	0.019	100.77
226	306-19	py	43.34	TAG-1	957C-15N-2-1D	46.77	53.98	0.017	0.028	100.80
227	307-20	py	43.34	TAG-1	957C-15N-2-1D	45.91	53.67	0.008	0.406	99.99
228	308-21	py	43.34	TAG-1	957C-15N-2-1D	45.91	53.73	bdl	0.607	100.25
229	309-22	py	43.34	TAG-1	957C-15N-2-1D	46.40	53.98	bdl	0.187	100.57
230	310-23	py	43.34	TAG-1	957C-15N-2-1D	46.73	54.02	0.013	0.194	100.96
231	311-24	py	43.34	TAG-1	957C-15N-2-1D	46.54	53.80	bdl	0.097	100.44
232	312-25	py	43.34	TAG-1	957C-15N-2-1D	46.48	53.79	bdl	0.125	100.39
233	313-26	py	43.34	TAG-1	957C-15N-2-1D	46.75	54.09	bdl	0.044	100.88
234	314-27	py	43.34	TAG-1	957C-15N-2-1D	46.56	53.95	bdl	0.019	100.53
235	315-28	py	43.34	TAG-1	957C-15N-2-1D	46.45	53.77	bdl	0.028	100.25
236	316-29	py	43.34	TAG-1	957C-15N-2-1D	46.59	53.90	0.002	bdl	100.49
237	317-30	py	43.34	TAG-1	957C-15N-2-1D	46.65	53.80	bdl	0.023	100.47
238	318-31	py	43.34	TAG-1	957C-15N-2-1D	46.62	54.05	0.019	0.014	100.70
239	319-32	py	43.34	TAG-1	957C-15N-2-1D	46.74	54.03	bdl	0.050	100.82
240	320-33	py	43.34	TAG-1	957C-15N-2-1D	46.76	53.87	0.007	0.018	100.65
241	321-34	py	43.34	TAG-1	957C-15N-2-1D	46.52	53.74	0.022	0.003	100.29
242	322-35	py	43.34	TAG-1	957C-15N-2-1D	46.39	54.05	0.057	0.019	100.52
243	323-36	py	43.34	TAG-1	957C-15N-2-1D	46.86	53.73	0.017	bdl	100.61
244	324-37	py	43.34	TAG-1	957C-15N-2-1D	46.72	53.85	0.020	0.036	100.63
245	325-38	py	43.34	TAG-1	957C-15N-2-1D	46.63	53.95	bdl	0.040	100.62
246	326-39	py	43.34	TAG-1	957C-15N-2-1D	46.53	53.84	bdl	0.020	100.39
247	327-40	py	43.34	TAG-1	957C-15N-2-1D	46.71	53.80	0.001	0.028	100.54
248	328-41	py	43.34	TAG-1	957C-15N-2-1D	46.47	53.53	0.008	0.069	100.08
249	329-42	py	43.34	TAG-1	957C-15N-2-1D	46.53	53.87	bdl	0.065	100.46
250	330-43	py	43.34	TAG-1	957C-15N-2-1D	46.41	53.83	bdl	0.048	100.29
251	331-44	py	43.34	TAG-1	957C-15N-2-1D	46.74	54.15	0.017	0.024	100.93
252	332-45	py	43.34	TAG-1	957C-15N-2-1D	46.63	53.95	bdl	0.003	100.58
253	333-46	py	43.34	TAG-1	957C-15N-2-1D	46.51	53.79	bdl	0.013	100.31
254	334-47	py	43.34	TAG-1	957C-15N-2-1D	46.68	53.96	bdl	0.018	100.66
255	335-48	py	43.34	TAG-1	957C-15N-2-1D	46.93	54.05	bdl	0.017	101.00
256	336-49	py	43.34	TAG-1	957C-15N-2-1D	46.77	54.03	bdl	0.020	100.82
257	337-50	py	43.34	TAG-1	957C-15N-2-1D	46.74	53.95	bdl	0.019	100.71
258	338-51	py	43.34	TAG-1	957C-15N-2-1D	46.63	53.94	bdl	bdl	100.57
259	339-52	py	43.34	TAG-1	957C-15N-2-1D	46.87	54.00	bdl	0.006	100.88
260	340-53	py	43.34	TAG-1	957C-15N-2-1D	46.49	53.96	bdl	0.031	100.48
261	341-54	py	43.34	TAG-1	957C-15N-2-1D	46.01	54.26	0.034	0.012	100.32
262	342-55	py	43.34	TAG-1	957C-15N-2-1D	46.50	54.18	0.014	0.007	100.70
263	343-56	py	43.34	TAG-1	957C-15N-2-1D	46.89	53.89	bdl	0.034	100.81
264	347-60	py	43.34	TAG-1	957C-15N-2-1D	46.41	53.61	0.021	0.053	100.09
265	348-61	py	43.34	TAG-1	957C-15N-2-1D	46.46	53.55	0.047	0.063	100.12
266	349-62	py	43.34	TAG-1	957C-15N-2-1D	46.68	54.09	bdl	0.037	100.81
267	350-63	py	43.34	TAG-1	957C-15N-2-1D	46.54	53.87	0.009	0.059	100.48
268	351-64	py	43.34	TAG-1	957C-15N-2-1D	46.53	53.88	bdl	0.030	100.44
269	352-65	py	43.34	TAG-1	957C-15N-2-1D	46.68	54.16	bdl	0.062	100.90
270	353-66	py	43.34	TAG-1	957C-15N-2-1D	46.77	53.79	bdl	0.012	100.57
271	354-67	py	43.34	TAG-1	957C-15N-2-1D	46.61	53.87	bdl	0.045	100.52
272	355-68	py	43.34	TAG-1	957C-15N-2-1D	46.69	53.83	0.016	0.006	100.54
273	356-69	py	43.34	TAG-1	957C-15N-2-1D	46.61	54.15	0.035	0.065	100.86
274	357-70	py	43.34	TAG-1	957C-15N-2-1D	46.49	53.91	bdl	0.016	100.42
275	358-71	py	43.34	TAG-1	957C-15N-2-1D	46.56	53.68	0.022	0.022	100.28
276	359-72	py	43.34	TAG-1	957C-15N-2-1D	46.51	53.78	bdl	0.035	100.33
277	360-73	py	43.34	TAG-1	957C-15N-2-1D	46.65	53.97	bdl	0.023	100.64
278	361-74	py	43.34	TAG-1	957C-15N-2-1D	46.37	53.66	bdl	0.008	100.04
279	362-75	py	43.34	TAG-1	957C-15N-2-1D	45.26	53.74	0.008	0.003	99.01
280	363-76	py	43.34	TAG-1	957C-15N-2-1D	46.26	53.84	bdl	0.013	100.11
281	364-77	py	43.34	TAG-1	957C-15N-2-1D	46.54	53.95	0.007	0.009	100.51
282	365-78	py	43.34	TAG-1	957C-15N-2-1D	46.26	53.87	bdl	0.045	100.17
283	366-79	py	43.34	TAG-1	957C-15N-2-1D	46.53	53.78	bdl	0.063	100.37
284	367-80	py	43.34	TAG-1	957C-15N-2-1D	46.63	53.94	bdl	bdl	100.57
285	368-81	py	43.34	TAG-1	957C-15N-2-1D	46.49	53.76	bdl	0.061	100.31
286	369-82	py	43.34	TAG-1	957C-15N-2-1D	46.53	53.88	bdl	0.006	100.42
287	370-83	py	43.34	TAG-1	957C-15N-2-1D	46.44	54.02	bdl	0.021	100.48
288	371-84	py	43.34	TAG-1	957C-15N-2-1D	46.49	53.91	0.037	bdl	100.44
289	382-95	py	43.34	TAG-1	957C-15N-2-1D	46.31	52.92	0.008	0.067	99.31
290	383-96	py	43.34	TAG-1	957C-15N-2-1D	46.13	53.89	0.029	0.126	100.17
291	384-97	py	43.34	TAG-1	957C-15N-2-1D	46.30	53.34	0.005	0.047	99.69
292	385-98	py	43.34	TAG-1	957C-15N-2-1D	46.67	54.07	bdl	0.031	100.77



Table B1: Major element EMPA analyses for sulfides from the TAG deposit (data in wt.%)

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No	Sample ID	Mineral	mbsf	TAG Area	Section	Fe	S	Zn	Cu	Total
293	386-99	py	43.34	TAG-1	957C-15N-2-1D	46.72	54.19	bdl	0.040	100.95
294	387-100	py	43.34	TAG-1	957C-15N-2-1D	46.60	54.09	bdl	0.024	100.71
295	389-102	py	43.34	TAG-1	957C-15N-2-1D	46.68	54.03	0.003	0.057	100.77
296	390-103	py	43.34	TAG-1	957C-15N-2-1D	46.31	53.16	bdl	0.049	99.52
297	392-105	py	43.34	TAG-1	957C-15N-2-1D	46.61	53.91	0.012	0.026	100.56
298	393-106	py	43.34	TAG-1	957C-15N-2-1D	46.75	53.95	bdl	0.041	100.74
299	394-107	py	43.34	TAG-1	957C-15N-2-1D	46.35	53.54	0.015	0.060	99.97
300	396-109	py	92	TAG-1	957E-12R-1-4	46.59	53.81	bdl	0.012	100.41
301	397-110	py	92	TAG-1	957E-12R-1-4	46.66	54.06	bdl	0.009	100.73
302	398-111	py	92	TAG-1	957E-12R-1-4	46.80	54.11	0.005	0.003	100.92
303	399-112	py	92	TAG-1	957E-12R-1-4	46.64	54.08	bdl	bdl	100.72
304	400-113	py	92	TAG-1	957E-12R-1-4	46.26	53.64	0.037	0.010	99.95
305	401-114	py	92	TAG-1	957E-12R-1-4	46.68	54.05	bdl	0.059	100.79
306	402-115	py	92	TAG-1	957E-12R-1-4	46.58	54.12	bdl	0.006	100.71
307	403-116	py	92	TAG-1	957E-12R-1-4	46.64	54.14	bdl	0.024	100.80
308	404-117	py	92	TAG-1	957E-12R-1-4	46.60	53.96	0.015	0.042	100.62
309	405-118	py	92	TAG-1	957E-12R-1-4	46.76	54.11	bdl	0.021	100.89
310	406-119	py	92	TAG-1	957E-12R-1-4	46.59	53.84	bdl	0.064	100.49
311	407-120	py	92	TAG-1	957E-12R-1-4	46.56	54.06	bdl	bdl	100.62
312	408-121	py	92	TAG-1	957E-12R-1-4	46.78	54.12	bdl	0.002	100.90
313	409-122	py	92	TAG-1	957E-12R-1-4	46.67	53.91	0.016	0.007	100.60
314	410-123	py	92	TAG-1	957E-12R-1-4	46.68	54.23	0.003	0.008	100.92
315	411-124	cpy	92	TAG-4	957E-12R-1-4	30.55	35.11	bdl	33.55	99.21
316	412-125	cpy	92	TAG-4	957E-12R-1-4	30.67	35.18	bdl	33.71	99.56
317	415-128	cpy	92	TAG-4	957E-12R-1-4	30.53	35.14	bdl	33.45	99.12
318	422-135	py	1.68	TAG-1	957F-1N-1-10D	46.89	53.97	0.014	0.007	100.88
319	427-140	py	1.68	TAG-1	957F-1N-1-10D	46.76	54.16	0.026	0.048	100.99
320	431-144	py	1.68	TAG-1	957F-1N-1-10D	46.84	54.00	bdl	0.016	100.86
321	437-150	py	1.68	TAG-1	957F-1N-1-10D	46.79	54.08	0.019	0.013	100.90
322	441-154	py	1.68	TAG-1	957F-1N-1-10D	46.96	53.92	0.022	0.055	100.96
323	443-156	py	1.68	TAG-1	957F-1N-1-10D	46.91	53.91	bdl	0.061	100.88
324	444-157	py	1.68	TAG-1	957F-1N-1-10D	46.82	53.86	bdl	0.092	100.77
325	452-165	py	1.68	TAG-1	957F-1N-1-10D	47.04	53.88	0.019	0.022	100.96
326	455-168	py	1.68	TAG-1	957F-1N-1-10D	46.62	53.59	0.031	0.093	100.33
327	463-176	py	1.68	TAG-1	957F-1N-1-10D	47.08	53.88	0.002	0.036	101.00
328	465-178	py	1.68	TAG-1	957F-1N-1-10D	47.08	53.75	bdl	0.033	100.86
329	467-180	py	1.68	TAG-1	957F-1N-1-10D	47.09	53.86	bdl	0.026	100.98
330	487-200	cpy	1.68	TAG-1	957F-1N-1-10D	30.73	35.01	bdl	34.77	100.51
331	488-201	cpy	1.68	TAG-1	957F-1N-1-10D	30.88	35.15	bdl	34.84	100.87
332	489-202	cpy	1.68	TAG-1	957F-1N-1-10D	30.63	35.22	bdl	34.78	100.63
333	490-203	cpy	1.68	TAG-1	957F-1N-1-10D	30.70	35.20	bdl	34.55	100.45
334	491-204	cpy	1.68	TAG-1	957F-1N-1-10D	30.66	35.18	bdl	34.65	100.49
335	493-206	mc	1.68	TAG-1	957F-1N-1-10D	47.00	53.73	0.005	0.020	100.76
336	494-207	mc	1.68	TAG-1	957F-1N-1-10D	47.05	53.71	0.009	0.009	100.78
337	495-208	mc	1.68	TAG-1	957F-1N-1-10D	47.20	53.75	0.014	0.039	101.00
338	500-213	py	1.68	TAG-1	957F-1N-1-10D	47.04	53.86	0.011	0.027	100.94
339	504-3	py	21.32	TAG-1	957C-7N-2-1D	47.37	52.97	0.044	0.378	100.76
340	507-6	py	21.32	TAG-1	957C-7N-2-1D	47.56	53.14	0.006	0.033	100.74
341	513-12	cpy	32.19	TAG-1	957C-11N-2-1B	30.41	34.75	bdl	33.93	99.09
342	514-13	cpy	32.19	TAG-1	957C-11N-2-1B	30.66	34.87	bdl	34.10	99.63
343	515-14	cpy	32.19	TAG-1	957C-11N-2-1B	30.93	34.89	bdl	34.25	100.07
344	516-15	cpy	32.19	TAG-1	957C-11N-2-1B	30.82	35.03	bdl	34.11	99.96
345	517-16	cpy	32.19	TAG-1	957C-11N-2-1B	30.86	34.91	bdl	34.16	99.93
346	518-17	cpy	32.19	TAG-1	957C-11N-2-1B	30.60	34.86	bdl	34.15	99.61
347	519-18	cpy	32.19	TAG-1	957C-11N-2-1B	30.79	35.00	bdl	34.17	99.96
348	520-19	cpy	32.19	TAG-1	957C-11N-2-1B	30.85	35.18	bdl	34.29	100.32
349	521-20	cpy	32.19	TAG-1	957C-11N-2-1B	30.92	35.08	bdl	34.20	100.20
350	522-21	cpy	32.19	TAG-1	957C-11N-2-1B	30.65	35.09	bdl	34.20	99.94
351	523-22	cpy	32.19	TAG-1	957C-11N-2-1B	30.60	34.81	bdl	34.07	99.48
352	524-23	cpy	32.19	TAG-1	957C-11N-2-1B	30.51	34.79	bdl	34.05	99.35
353	525-24	cpy	32.19	TAG-1	957C-11N-2-1B	30.65	34.82	bdl	34.12	99.59
354	526-25	cpy	32.19	TAG-1	957C-11N-2-1B	30.47	34.91	bdl	34.10	99.48
355	527-26	cpy	32.19	TAG-1	957C-11N-2-1B	30.70	34.87	bdl	34.05	99.62
356	528-27	cpy	32.19	TAG-1	957C-11N-2-1B	31.22	34.75	bdl	34.00	99.97
357	529-28	cpy	32.19	TAG-1	957C-11N-2-1B	31.15	34.76	bdl	33.96	99.87
358	530-29	cpy	32.19	TAG-1	957C-11N-2-1B	31.07	34.86	bdl	34.15	100.08
359	531-30	cpy	32.19	TAG-1	957C-11N-2-1B	30.98	34.90	bdl	34.20	100.08
360	532-31	cpy	32.19	TAG-1	957C-11N-2-1B	30.94	34.76	bdl	34.17	99.87
361	533-32	cpy	32.19	TAG-1	957C-11N-2-1B	30.97	35.13	bdl	34.13	100.23
362	534-33	cpy	32.19	TAG-1	957C-11N-2-1B	30.87	34.81	bdl	34.08	99.76
363	535-34	cpy	32.19	TAG-1	957C-11N-2-1B	30.83	34.95	bdl	33.95	99.73
364	536-35	cpy	32.19	TAG-1	957C-11N-2-1B	30.87	34.97	bdl	34.04	99.88
365	537-36	cpy	32.19	TAG-1	957C-11N-2-1B	30.87	34.97	bdl	34.17	100.01

Table B1: Major element EMPA analyses for sulfides from the TAG deposit (data in wt.%)

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No	Sample ID	Mineral	mbsf	TAG Area	Section	Fe	S	Zn	Cu	Total
366	538-37	cpy	32.19	TAG-1	957C-11N-2-1B	30.95	34.96	bdl	33.96	99.87
367	539-38	cpy	32.19	TAG-1	957C-11N-2-1B	30.97	35.06	bdl	34.13	100.16
368	540-39	cpy	32.19	TAG-1	957C-11N-2-1B	30.96	34.92	bdl	34.12	100.00
369	541-40	cpy	32.19	TAG-1	957C-11N-2-1B	30.95	34.85	bdl	33.74	99.54
370	542-41	cpy	32.19	TAG-1	957C-11N-2-1B	31.03	34.83	bdl	34.17	100.03
371	543-42	cpy	32.19	TAG-1	957C-11N-2-1B	30.54	34.83	bdl	33.95	99.32
372	544-43	cpy	32.19	TAG-1	957C-11N-2-1B	31.03	35.18	bdl	34.19	100.40
373	545-44	cpy	32.19	TAG-1	957C-11N-2-1B	30.91	35.08	bdl	33.98	99.97
374	546-45	cpy	32.19	TAG-1	957C-11N-2-1B	30.89	35.00	bdl	34.41	100.30
375	547-46	cpy	32.19	TAG-1	957C-11N-2-1B	30.92	34.98	bdl	34.14	100.04
376	548-47	cpy	32.19	TAG-1	957C-11N-2-1B	31.00	34.83	bdl	34.14	99.97
377	549-48	cpy	32.19	TAG-1	957C-11N-2-1B	30.91	34.79	bdl	34.15	99.85
378	550-49	cpy	32.19	TAG-1	957C-11N-2-1B	31.17	34.83	bdl	34.14	100.14
379	551-50	cpy	32.19	TAG-1	957C-11N-2-1B	30.84	34.88	bdl	34.12	99.84
380	552-51	cpy	32.19	TAG-1	957C-11N-2-1B	30.97	34.93	bdl	34.11	100.01
381	553-52	cpy	32.19	TAG-1	957C-11N-2-1B	30.83	34.96	bdl	34.19	99.98
382	554-53	cpy	32.19	TAG-1	957C-11N-2-1B	30.82	35.15	bdl	34.19	100.16
383	555-54	cpy	32.19	TAG-1	957C-11N-2-1B	30.71	34.85	bdl	34.19	99.75
384	556-55	cpy	32.19	TAG-1	957C-11N-2-1B	30.93	34.95	bdl	34.20	100.08
385	557-56	cpy	32.19	TAG-1	957C-11N-2-1B	30.81	35.00	bdl	34.07	99.88
386	558-57	cpy	32.19	TAG-1	957C-11N-2-1B	30.87	35.15	bdl	34.14	100.16
387	559-58	cpy	32.19	TAG-1	957C-11N-2-1B	30.62	34.94	bdl	34.13	99.69
388	560-59	cpy	32.19	TAG-1	957C-11N-2-1B	30.93	35.21	bdl	34.20	100.34
389	561-60	cpy	32.19	TAG-1	957C-11N-2-1B	30.84	35.25	bdl	34.23	100.32
390	562-61	cpy	32.19	TAG-1	957C-11N-2-1B	30.78	34.91	bdl	34.10	99.79
391	563-62	cpy	32.19	TAG-1	957C-11N-2-1B	30.90	34.99	bdl	34.12	100.01
392	564-63	cpy	32.19	TAG-1	957C-11N-2-1B	31.03	34.94	bdl	34.11	100.08
393	565-64	cpy	32.19	TAG-1	957C-11N-2-1B	30.98	34.68	bdl	34.13	99.79
394	566-65	cpy	32.19	TAG-1	957C-11N-2-1B	31.14	34.90	bdl	33.97	100.01
395	567-66	cpy	32.19	TAG-1	957C-11N-2-1B	31.03	34.99	bdl	34.06	100.08
396	573-72	cpy	15.6	TAG-4	957M-3R-1-30	31.07	34.96	bdl	34.69	100.72
397	574-73	cpy	15.6	TAG-4	957M-3R-1-30	30.97	35.01	bdl	34.70	100.68
398	575-74	cpy	15.6	TAG-4	957M-3R-1-30	30.93	35.14	bdl	34.77	100.84
399	576-75	cpy	15.6	TAG-4	957M-3R-1-30	30.74	35.15	bdl	34.73	100.62
400	577-76	cpy	15.6	TAG-4	957M-3R-1-30	30.87	35.04	bdl	34.77	100.68
401	578-77	cpy	15.6	TAG-4	957M-3R-1-30	30.47	34.92	bdl	35.01	100.40
402	579-78	cpy	15.6	TAG-4	957M-3R-1-30	30.53	34.80	bdl	35.04	100.37
403	580-79	cpy	15.6	TAG-4	957M-3R-1-30	30.38	34.80	bdl	34.83	100.01
404	581-80	cpy	15.6	TAG-4	957M-3R-1-30	30.13	35.08	bdl	35.04	100.25
405	582-81	cpy	15.6	TAG-4	957M-3R-1-30	30.14	34.76	bdl	34.93	99.83
406	583-82	cpy	15.6	TAG-4	957M-3R-1-30	30.31	35.02	bdl	35.16	100.49
407	584-83	cpy	15.6	TAG-4	957M-3R-1-30	30.32	34.97	bdl	35.28	100.57
408	585-84	cpy	15.6	TAG-4	957M-3R-1-30	30.34	34.87	bdl	35.09	100.30
409	586-85	cpy	15.6	TAG-4	957M-3R-1-30	30.18	34.91	bdl	35.11	100.20
410	587-86	cpy	15.6	TAG-4	957M-3R-1-30	30.38	34.97	bdl	34.89	100.24
411	596-95	cpy	15.39	TAG-1	957C-5N-1-6	29.74	35.05	bdl	34.27	99.06
412	606-3	sph	14.71	TAG-4	957M-3R-1-11A	2.12	33.15	64.76	0.175	100.20
413	607-4	sph	14.71	TAG-4	957M-3R-1-11A	3.03	33.23	63.44	0.331	100.03
414	608-5	sph	14.71	TAG-4	957M-3R-1-11A	2.21	33.05	64.71	0.062	100.03
415	609-6	sph	14.71	TAG-4	957M-3R-1-11A	1.81	32.76	65.01	0.397	99.98
416	610-7	sph	14.71	TAG-4	957M-3R-1-11A	1.65	32.61	65.12	0.258	99.64
417	613-10	sph	14.71	TAG-4	957M-3R-1-11A	3.19	32.96	63.15	0.178	99.48
418	614-11	sph	14.71	TAG-4	957M-3R-1-11A	2.11	32.57	63.97	0.406	99.06
419	615-12	sph	14.71	TAG-4	957M-3R-1-11A	2.69	33.29	63.91	0.223	100.11
420	616-13	cpy	32.35	TAG-1	957C-11N-2-1E	31.12	35.14	0.146	34.24	100.65
421	617-14	cpy	32.35	TAG-1	957C-11N-2-1E	31.00	35.06	0.144	34.19	100.39
422	618-15	cpy	32.35	TAG-1	957C-11N-2-1E	31.21	35.07	0.195	34.31	100.79
423	619-16	cpy	32.35	TAG-1	957C-11N-2-1E	31.02	34.96	0.148	34.15	100.28
424	620-17	cpy	32.35	TAG-1	957C-11N-2-1E	31.01	35.01	0.145	34.08	100.24
425	621-18	sph	14.71	TAG-4	957M-3R-1-11A	2.38	32.72	63.82	0.281	99.20
426	622-19	sph	14.71	TAG-4	957M-3R-1-11A	1.74	32.75	64.40	0.411	99.30
427	623-20	sph	14.71	TAG-4	957M-3R-1-11A	1.78	33.01	64.15	0.478	99.42
428	624-21	sph	14.71	TAG-4	957M-3R-1-11A	2.08	32.54	64.03	0.406	99.06
429	625-22	sph	14.71	TAG-4	957M-3R-1-11A	1.75	32.95	64.53	0.434	99.66
430	626-23	sph	14.71	TAG-4	957M-3R-1-11A	2.41	33.03	64.81	0.640	100.89
431	627-24	sph	14.71	TAG-4	957M-3R-1-11A	2.57	32.70	64.70	0.859	100.83
432	628-25	sph	14.71	TAG-4	957M-3R-1-11A	2.74	33.10	64.31	0.723	100.87
433	629-26	sph	14.71	TAG-4	957M-3R-1-11A	2.74	32.80	64.54	0.820	100.90
434	630-27	sph	14.71	TAG-4	957M-3R-1-11A	2.21	33.03	64.82	0.872	100.93
435	631-28	cpy	32.35	TAG-1	957C-11N-2-1E	30.38	34.97	0.414	34.24	100.00
436	632-29	cpy	32.35	TAG-1	957C-11N-2-1E	30.41	34.95	0.417	34.40	100.18
437	633-30	cpy	32.35	TAG-1	957C-11N-2-1E	30.63	34.97	0.358	34.47	100.43
438	634-31	cpy	32.35	TAG-1	957C-11N-2-1E	30.38	34.84	0.372	33.99	99.58

Table B1: Major element EMPA analyses for sulfides from the TAG deposit (data in wt.%)

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No	Sample ID	Mineral	mbsf	TAG Area	Section	Fe	S	Zn	Cu	Total
439	635-32	cpy	32.35	TAG-1	957C-11N-2-1E	30.65	34.83	0.149	34.37	100.00
440	638-35	sph	14.61	TAG-4	957K-3X-1-3	1.02	32.71	66.02	0.123	99.87
441	639-36	sph	14.61	TAG-4	957K-3X-1-3	1.01	32.35	65.71	0.143	99.21
442	640-37	sph	14.61	TAG-4	957K-3X-1-3	1.18	32.72	65.63	0.017	99.55
443	641-38	sph	14.61	TAG-4	957K-3X-1-3	1.06	32.73	65.92	0.133	99.84
444	642-39	sph	14.61	TAG-4	957K-3X-1-3	1.10	32.51	65.42	0.170	99.20
445	643-40	sph	14.61	TAG-4	957K-3X-1-3	2.93	33.03	63.65	0.102	99.71
446	644-41	sph	14.61	TAG-4	957K-3X-1-3	2.67	32.91	64.07	0.152	99.80
447	645-42	sph	14.61	TAG-4	957K-3X-1-3	1.86	32.91	64.81	0.071	99.65
448	646-43	sph	14.61	TAG-4	957K-3X-1-3	1.98	32.94	64.57	0.141	99.63
449	647-44	sph	14.61	TAG-4	957K-3X-1-3	2.22	32.96	64.48	0.078	99.74
450	648-45	sph	14.61	TAG-4	957K-3X-1-3	2.22	32.63	64.30	0.235	99.39
451	649-46	sph	14.61	TAG-4	957K-3X-1-3	2.15	32.63	64.44	0.167	99.39
452	650-47	sph	14.61	TAG-4	957K-3X-1-3	3.11	32.73	63.32	0.137	99.30
453	651-48	sph	14.61	TAG-4	957K-3X-1-3	2.96	32.66	63.81	0.121	99.55
454	652-49	sph	14.61	TAG-4	957K-3X-1-3	2.71	32.85	63.94	0.201	99.70

Major element compositions (wt.%) determined by EMPA of selected minerals in ODP Leg 158 drill cores from the TAG Hydrothermal Mound. Sample ID, mineral phases, and location in the deposit are indicated. bdl = below detection limit.

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

1 of 16

No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Fe	Cu	Zn	Pb	Au	Ag	As	Cd	Mn	Ga	Ge	In
1	1-1	py	Py I	5	40.1	3	9	957P-9R-1-1		120.1	1.00	1.40	0.02		28.2	0.20	0.50	1.80	3.20	
2	2-2	py	Py VI	5	40.1	3	9	957P-9R-1-1		42.6	1.60	0.10			57.2		0.30	0.10	1.20	
3	4-4	py	Py I	5	40.1	3	9	957P-9R-1-1		38.8	1.10	42.1		0.10	31.1		0.60			
4	5-5	py	Py III	5	40.1	3	9	957P-9R-1-1		2.70				0.10			0.30	0.20		0.02
5	8-8	py	Py III	5	40.1	3	9	957P-9R-1-1		12.8	1.20	1.90	0.02	0.10	7.40		0.40		1.50	
6	9-9	py	Py I	5	40.1	3	9	957P-9R-1-1		54.8	0.90	0.90			12.3		0.30			
7	11-11	py	Py III	5	40.1	3	9	957P-9R-1-1		42.7	0.80		0.02		22.8		0.60	0.10	1.90	
8	12-12	py	Py III	5	40.1	3	9	957P-9R-1-1		3.70	0.80	0.20			1.80		0.30		1.50	
9	20-20	py	Py V	5	40.1	3	9	957P-9R-1-1		55.9	6.00	17.9	0.01	0.50	9.90	0.70	0.50	0.10	2.10	
10	21-21	py	Py I	5	40.1	3	9	957P-9R-1-1		49.7	5.20	19.8	0.02	0.60	9.20	0.50	0.40		2.30	
11	23-23	py	Py III	5	40.1	3	9	957P-9R-1-1		23.6	5.40	1.70			7.80	0.60	0.30	0.10		
12	24-24	py	Py III	5	40.1	3	9	957P-9R-1-1		7.70	0.60	1.10		0.10	14.9	0.30	0.30			
13	27-27	py	Py III	5	40.1	3	9	957P-9R-1-1		46.1	3.40	300.3	0.20	0.90	10.4		1.00			
14	28-28	py	Py III	5	40.1	3	9	957P-9R-1-1		111.7	3.50	32.8	0.20	1.50	25.4	0.30	1.00		1.70	
15	30-30	py	Py III	5	40.1	3	9	957P-9R-1-1		35.2	2.10	5.50	0.03	0.10	21.6	0.30	0.40			
16	31-31	py	Py III	5	40.1	3	9	957P-9R-1-1		62.3	2.60	1.30		0.10	10.2		0.30	0.20		0.04
17	32-32	py	Py I	1	21.32	2	7	957C-7N-2-1D		182.6	9.70	16.4	0.02	0.80	24.6	0.20	0.70			0.02
18	33-33	py	Py IV	1	21.32	2	7	957C-7N-2-1D		35.0	1.30	0.50			10.1		0.40	0.10	1.90	
19	35-35	py	Py IV	1	21.32	2	7	957C-7N-2-1D		67.4	0.90	6.90	0.02		52.9		0.40			0.02
20	36-36	py	Py IV	1	21.32	2	7	957C-7N-2-1D		124.1	0.80	0.70		0.10	1.60		0.30			
21	39-39	py	Py IV	1	21.32	2	7	957C-7N-2-1D		611.4	5.30	96.7	0.40	3.00	55.4	0.50	2.00		1.70	0.03
22	40-40	py	Py IV	1	21.32	2	7	957C-7N-2-1D		1.00			0.02		2.70	0.40	0.10	0.20	0.90	
23	42-42	py	Py I	1	21.32	2	7	957C-7N-2-1D		364.9		27.8	0.04	1.60	77.8	2.10	3.10	0.60	2.00	0.10
24	43-43	py	Py IV	1	21.32	2	7	957C-7N-2-1D		420.5	368.1	40.2	0.05	3.20	35.7		1.20	0.40		0.02
25	44-44	py	Py II	4	14.61	1	5	957K-3X-1-3		33.0	64.4	52.5		0.20	16.1	1.10	20.4		2.60	
26	45-45	py	Py V	4	14.61	1	5	957K-3X-1-3		7.40	5.30	45.2	0.10	1.30	11.8		0.60		1.10	0.02
27	47-47	py	Py VI	4	14.61	1	5	957K-3X-1-3		179.0		150.5	0.30	6.60	70.5	5.30	2.00	0.90	1.00	
28	48-48	sph	-	4	14.61	1	5	957K-3X-1-3	9203	985.5		96.9	0.12	118.0	79.1	1104	6.00	241.9	355.6	16.1
29	51-51	py	Py IV	4	14.61	1	5	957K-3X-1-3		264.1	130.5	222.7	0.50	7.80	124.0	0.90	4.80	0.10		
30	52-52	mc	-	4	14.61	1	5	957K-3X-1-3		96.1	289.6	125.9	0.28	9.85	64.8	1.03	7.91	0.24	3.17	
31	54-54	sph	-	4	14.61	1	5	957K-3X-1-3	7957	1131		218.2	0.31	185.4	88.2	1046	6.48	240.6	401.7	12.7
32	55-55	py	Py V	4	14.61	1	5	957K-3X-1-3		2.30		132.5	0.40	3.60	2.60	0.30	1.00		2.30	
33	56-56	py	Py VI	4	14.61	1	5	957K-3X-1-3		136.0	34.2	359.3	0.60	18.4	23.3	0.80	3.80	2.80	1.80	
34	57-57	py	Py V	4	14.61	1	5	957K-3X-1-3		11.3	40.4	217.0	0.20	2.10	9.50	0.70	2.20		5.40	
35	59-59	py	Py I	4	14.61	1	5	957K-3X-1-3		2.10	0.80	162.8	0.40	3.80	2.60		1.10	0.10		
36	60-60	py	Py VI	4	14.61	1	5	957K-3X-1-3		64.1		130.1	0.50	4.40	54.5	21.3		4.50	5.80	0.10
37	63-63	py	Py II	4	14.61	1	5	957K-3X-1-3		2.20	403.7	48.7			25.1		24.9			0.20
38	64-64	mc	-	4	14.61	1	5	957K-3X-1-3		3.25	121.2	0.96			7.16	1.58	4.01			
39	67-67	py	Py V	4	14.61	1	5	957K-3X-1-3		39.6	33.7	9.20		1.60	3.90	0.60	4.50			
40	68-68	mc	-	4	14.61	1	5	957K-3X-1-3		44.3	815.7	23.7	0.07	2.41	42.3	2.28	11.5	1.50		
41	69-69	py	Py II	4	14.61	1	5	957K-3X-1-3		161.2		299.2	0.50	13.2	69.3	4.10	21.1	0.60	11.3	
42	71-71	mc	-	4	14.61	1	5	957K-3X-1-3		3.83	4.42	58.3		1.29	17.0	0.77	5.64			0.09
43	72-72	py	Py II	4	14.61	1	5	957K-3X-1-3		61.4	54.1	20.0	0.20	3.70	53.0		28.0		7.60	
44	76-76	sph	-	4	14.61	1	5	957K-3X-1-3	42513	726.6		1.95		7.87		878.8	25.0	208.6	17.3	0.20
45	80-80	py	Py IV	4	15.6	3	9	957M-3R-1-30		49.9	1.10	0.02	0.03			0.20	0.60			

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Sn	Mo	W	Sb	Te	Tl	Bi	Co	Ni	Se	V	U
1	1-1	py	Py I	5	40.1	3	9	957P-9R-1-1		9.20	1.00	0.80			0.10	15.8		4.00	2.70	
2	2-2	py	Py VI	5	40.1	3	9	957P-9R-1-1		9.20				0.02	0.10	4187		10.0	0.10	
3	4-4	py	Py I	5	40.1	3	9	957P-9R-1-1	0.20	3.60		2.30	0.80	0.30		109.7	84.9	4.90	0.20	0.01
4	5-5	py	Py III	5	40.1	3	9	957P-9R-1-1	0.10				1.00			269.8		25.9		0.01
5	8-8	py	Py III	5	40.1	3	9	957P-9R-1-1	0.10	1.20		0.10			0.20	2335		34.1		
6	9-9	py	Py I	5	40.1	3	9	957P-9R-1-1	0.30	7.40			0.70		0.40	1059		34.9	0.05	0.001
7	11-11	py	Py III	5	40.1	3	9	957P-9R-1-1							0.04	270.7	1.70	76.4		
8	12-12	py	Py III	5	40.1	3	9	957P-9R-1-1	0.03					0.01	0.10	649.4		33.2		
9	20-20	py	Py V	5	40.1	3	9	957P-9R-1-1		1.00		0.30		0.10	0.10	569.2		19.6	0.10	0.05
10	21-21	py	Py I	5	40.1	3	9	957P-9R-1-1		1.20	0.04	0.30		0.10	0.60	2370		38.0		0.03
11	23-23	py	Py III	5	40.1	3	9	957P-9R-1-1	0.10	1.00		0.10		0.10	0.40	184.0	2.00	14.9	0.10	0.01
12	24-24	py	Py III	5	40.1	3	9	957P-9R-1-1		0.30		0.10		0.10	0.10	1215		47.9	0.04	0.20
13	27-27	py	Py III	5	40.1	3	9	957P-9R-1-1			0.05	0.10	0.60	5.20	0.04	15.7			0.30	
14	28-28	py	Py III	5	40.1	3	9	957P-9R-1-1	0.03			0.50		18.0	1.00	34.9	1.40		0.30	
15	30-30	py	Py III	5	40.1	3	9	957P-9R-1-1	0.10	5.20		0.20	0.40	0.10	0.80	941.7	2.10	16.8	0.60	0.20
16	31-31	py	Py III	5	40.1	3	9	957P-9R-1-1		0.70		0.10	1.00	0.04	0.50	1014		25.9	0.10	0.20
17	32-32	py	Py I	1	21.32	2	7	957C-7N-2-1D		66.5		1.30		1.20	0.80	769.2		5.10	0.50	0.10
18	33-33	py	Py IV	1	21.32	2	7	957C-7N-2-1D		2.60		0.10	0.80	0.10	0.10	489.0		37.3	0.04	0.02
19	35-35	py	Py IV	1	21.32	2	7	957C-7N-2-1D		5.10		0.30		0.20	0.20	272.0		11.2		0.02
20	36-36	py	Py IV	1	21.32	2	7	957C-7N-2-1D		2.70					0.01	156.5	1.10		0.04	
21	39-39	py	Py IV	1	21.32	2	7	957C-7N-2-1D		15.9	0.03	1.80	0.70	0.90	0.10	44.1	1.50		1.00	0.10
22	40-40	py	Py IV	1	21.32	2	7	957C-7N-2-1D				0.10				0.10	3.00			0.001
23	42-42	py	Py I	1	21.32	2	7	957C-7N-2-1D		150.2	0.02	1.50		11.1	0.10	47.3			4.90	1.30
24	43-43	py	Py IV	1	21.32	2	7	957C-7N-2-1D		60.1		0.60	0.70	5.60	0.03	103.1		2.00	1.80	0.30
25	44-44	py	Py II	4	14.61	1	5	957K-3X-1-3		77.7	0.10	0.40		28.0		0.60			6.00	0.50
26	45-45	py	Py V	4	14.61	1	5	957K-3X-1-3	0.10	1.50		0.80		1.60	0.02	0.30	1.90		0.10	
27	47-47	py	Py VI	4	14.61	1	5	957K-3X-1-3	0.04	15.7	0.10	2.30		2.40	0.03	51.4	2.50		1.60	1.50
28	48-48	sph	-	4	14.61	1	5	957K-3X-1-3	0.96			22.3		0.10	0.04	9.61	1.62		0.15	0.01
29	51-51	py	Py IV	4	14.61	1	5	957K-3X-1-3	0.10	95.0	0.60	5.10		3.20		77.1	7.50		3.00	0.70
30	52-52	mc	-	4	14.61	1	5	957K-3X-1-3	0.06	91.3	0.23	1.91	0.46	7.46	0.02	5.99	4.19		3.61	0.08
31	54-54	sph	-	4	14.61	1	5	957K-3X-1-3	1.39	2.03	0.01	18.5		0.26	0.03	8.40				0.01
32	55-55	py	Py V	4	14.61	1	5	957K-3X-1-3	0.04	0.60	0.10	0.30		0.10		0.20	1.90		0.30	0.10
33	56-56	py	Py VI	4	14.61	1	5	957K-3X-1-3	0.10	85.6		3.80	0.80	38.4	0.05	11.8	3.10		4.10	0.30
34	57-57	py	Py V	4	14.61	1	5	957K-3X-1-3	0.30	10.4		3.10		21.0	0.10				1.20	
35	59-59	py	Py I	4	14.61	1	5	957K-3X-1-3		0.90		0.40	0.30	0.20					0.50	0.10
36	60-60	py	Py VI	4	14.61	1	5	957K-3X-1-3	1.00	65.9		7.70		0.30		141.5			2.90	2.10
37	63-63	py	Py II	4	14.61	1	5	957K-3X-1-3		121.5	0.20	0.70		25.1	0.20	3.60	4.80		3.00	0.50
38	64-64	mc	-	4	14.61	1	5	957K-3X-1-3	0.62	107.5	0.11	1.48		18.2	0.12	0.55	7.75		3.46	0.06
39	67-67	py	Py V	4	14.61	1	5	957K-3X-1-3		50.0		2.10		18.9	0.10	1.40		4.50	2.00	0.04
40	68-68	mc	-	4	14.61	1	5	957K-3X-1-3	0.36	111.8	0.31	2.02		7.01		3.09		6.32	4.17	0.22
41	69-69	py	Py II	4	14.61	1	5	957K-3X-1-3		77.4		2.70		25.7			7.30		2.00	0.02
42	71-71	mc	-	4	14.61	1	5	957K-3X-1-3		24.6	0.15	0.60	3.53	12.1		0.73		8.24	5.38	0.05
43	72-72	py	Py II	4	14.61	1	5	957K-3X-1-3		57.9	0.10	1.40		9.00	0.10	5.50		16.2	3.00	0.01
44	76-76	sph	-	4	14.61	1	5	957K-3X-1-3				3.34				1.23				
45	80-80	py	Py IV	4	15.6	3	9	957M-3R-1-30		0.70			0.50		0.02	904.7		4.10		

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	PyritPy V TypPy	TAG area	mbsf	Min. Zone	Min. Type	Section	Fe	Cu	Zn	Pb	Au	Ag	As	Cd	Mn	Ga	Ge	In
46	81-81	py	Py IV	4	15.6	3	9	957M-3R-1-30		107.7	1.20	0.10			1.10		0.60		2.10	0.03
47	83-83	py	Py IV	4	15.6	3	9	957M-3R-1-30		194.2		0.10			3.20		0.20		0.90	
48	84-84	py	Py IV	4	15.6	3	9	957M-3R-1-30		173.8				0.7			0.60			0.03
49	87-87	py	Py IV	4	15.6	3	9	957M-3R-1-30		384.0	1.20	0.40	0.03		20.7		0.50	0.10	2.20	0.03
50	88-88	py	Py IV	4	15.6	3	9	957M-3R-1-30		332.7	2.30	0.10	0.02		6.60	0.40	0.50			
51	90-90	py	Py IV	4	15.6	3	9	957M-3R-1-30		256.0	0.70	0.10			7.40		0.50	0.20		0.10
52	91-91	py	Py IV	4	15.6	3	9	957M-3R-1-30		88.1	0.90	0.10	0.01		9.30	0.40	0.40			
53	92-92	py	Py V	4	15.6	3	9	957M-3R-1-30		96.2	21.3	43.4	0.30	14.3	37.4	0.60	3.20		4.60	
54	93-93	py	Py V	4	15.6	3	9	957M-3R-1-30		46.5	13.5	38.5	0.20	5.10	19.4	1.00	2.50		6.20	0.05
55	95-95	py	Py IV	4	15.6	3	9	957M-3R-1-30		42.4	48.6	103.7	0.40	5.30	42.6	0.40	1.90			
56	96-96	py	Py V	4	15.6	3	9	957M-3R-1-30		395.9	46.6	14.4	0.60	0.70	50.2	0.60	0.60	0.10	3.10	0.04
57	99-99	py	Py IV	4	15.6	3	9	957M-3R-1-30		909.3	0.60	0.10	0.10	0.10	1.40	0.50	0.30			0.10
58	100-100	cpy	-	4	15.6	1	9	957M-3R-1-30			8.61			46.0		2.06	0.85	2.70		7.39
59	102-102	cpy	-	4	15.6	1	9	957M-3R-1-30			9.23	1.52	0.06	56.9		2.67	0.71	2.61		7.23
60	103-103	py	Py I	4	15.6	3	9	957M-3R-1-30		1900	68.7	6.50	0.40	4.70	12.7	2.60	0.20	0.70		0.70
61	104-104	py	Py IV	4	15.6	3	9	957M-3R-1-30		21.9		0.10	0.10	0.50	3.80	0.40	0.90	0.10		
62	105-105	py	Py IV	4	15.6	3	9	957M-3R-1-30		22.2	2.10	18.7	0.10	1.10	16.6	0.60	1.40			
63	107-107	py	Py V	4	15.6	3	9	957M-3R-1-30		243.0	590.0	147.2	0.20	7.30	80.6	4.40	27.1	1.00		0.03
64	108-108	mc	-	4	15.6	1	9	957M-3R-1-30		17.8	1.61	2.84	0.01	0.09	9.66		0.40			0.02
65	111-111	py	Py V	4	15.6	3	9	957M-3R-1-30		122.2	0.90	30.1	0.04	2.50	5.90		0.50	0.10	1.50	
66	112-112	py	Py V	4	15.6	3	9	957M-3R-1-30		119.4	103.8	14.2	0.10	2.00	13.9	0.90	228.3		1.80	
67	114-114	py	Py IV	4	15.6	3	9	957M-3R-1-30		52.2	0.60	0.20			6.10		0.40	0.60		
68	115-115	py	Py IV	4	15.6	3	9	957M-3R-1-30		17.3	15.4	2.90		0.10	44.8	0.20	0.30	0.10		
69	117-2	mc	-	4	15.6	1	5	957M-3R-1-30		41.2	86.8	56.7		2.16	44.1	0.84	1.32			0.28
70	119-4	cpy	-	4	15.6	1	5	957M-3R-1-30			131.4	2.28		12.9		5.56		8.98		15.1
71	120-5	mc	-	4	15.6	1	5	957M-3R-1-30		24.8	6.49	29.0		1.39	88.3	1.12				
72	123-8	cpy	-	4	15.6	1	5	957M-3R-1-30			628.0	19.4	0.78	33.5	2.50	7.44		5.01		6.67
73	124-9	mc	-	4	15.6	1	5	957M-3R-1-30		61.0	19.1	8.59		1.30	15.4		0.69			0.09
74	126-11	cpy	-	4	15.6	1	5	957M-3R-1-30			103.0	11.8		19.3		14.4	0.94	51.6	13.8	52.8
75	127-12	cpy	-	4	15.6	1	5	957M-3R-1-30			568.5	10.4	0.58	23.2		9.66	1.12	91.0		27.8
76	128-13	py	Py III	1	21.32	2	7	957C-7N-2-1D		25.4		3.40		0.40	10.4					
77	129-14	py	Py III	1	21.32	2	7	957C-7N-2-1D		106.7		1.30			26.0		1.10		5.40	
78	131-16	py	Py III	1	21.32	2	7	957C-7N-2-1D		49.5	8.50	1.40		0.40			1.40			
79	132-17	py	Py III	1	21.32	2	7	957C-7N-2-1D		45.0	2.80				38.4		0.90			0.20
80	135-20	py	Py III	1	21.32	2	7	957C-7N-2-1D		10.8	2.30	1.50			10.1		0.90			0.10
81	136-21	py	Py III	1	21.32	2	7	957C-7N-2-1D		396.5	5.40	30.4		1.20	71.5		3.90			
82	138-23	py	Py III	1	21.32	2	7	957C-7N-2-1D		227.8	4.00	6.10			34.5		1.10			
83	139-24	py	Py III	1	21.32	2	7	957C-7N-2-1D		388.3	64.7	46.5	1.30	0.70	56.5	0.80	1.50	0.40	10.1	
84	140-25	py	Py I	1	43.34	3	10a	957C-15N-2-1D		344.4	3.50	2.70			29.1		0.50	0.10		
85	141-26	py	Py VI	1	43.34	3	10a	957C-15N-2-1D		529.0	3.60	11.1		0.20	10.6		0.80	0.10		
86	143-28	py	Py VI	1	43.34	3	10a	957C-15N-2-1D		179.2	3.10	13.4		0.20	9.90		0.50			
87	144-29	py	Py III	1	43.34	3	10a	957C-15N-2-1D		2.90	9.70	8.80		1.00	5.60		0.40			
88	147-32	py	Py III	1	43.34	3	10a	957C-15N-2-1D		210.5	1.10	0.90			11.6		0.40			0.03
89	148-33	py	Py II	1	43.34	3	10a	957C-15N-2-1D		49.7	1.00	5.20			16.1		2.90		2.10	
90	150-35	py	Py IV	1	43.34	3	10a	957C-15N-2-1D		24.4	1.10	8.50		0.30	22.1		0.30			

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	PyritPy V TypPy	TAG area	mbsf	Min. Zone	Min. Type	Section	Sn	Mo	W	Sb	Te	Tl	Bi	Co	Ni	Se	V	U
46	81-81	py	Py IV	4	15.6	3	9	957M-3R-1-30	0.05	8.90		0.10	3.10		0.03	1149		10.1	0.10	
47	83-83	py	Py IV	4	15.6	3	9	957M-3R-1-30		5.40	0.02		3.70		0.02	1076		9.30	0.10	
48	84-84	py	Py IV	4	15.6	3	9	957M-3R-1-30		9.60					0.40	1837		41.1		
49	87-87	py	Py IV	4	15.6	3	9	957M-3R-1-30		3.70		0.10	0.60		0.50	341.3		20.6	0.10	0.002
50	88-88	py	Py IV	4	15.6	3	9	957M-3R-1-30		5.50			3.20		0.03	2091	2.60	63.1	0.10	
51	90-90	py	Py IV	4	15.6	3	9	957M-3R-1-30	0.10	1.40		0.10		0.04	0.20	2275		23.7		
52	91-91	py	Py IV	4	15.6	3	9	957M-3R-1-30		0.40					0.10	689.3		112.4		
53	92-92	py	Py V	4	15.6	3	9	957M-3R-1-30		25.2	0.03	4.80		4.40		1.50	3.30			0.10
54	93-93	py	Py V	4	15.6	3	9	957M-3R-1-30		120.4		3.40		152.2		1.30	4.80		0.80	0.10
55	95-95	py	Py IV	4	15.6	3	9	957M-3R-1-30		62.2		1.20		11.7	0.02	0.40			0.10	0.02
56	96-96	py	Py V	4	15.6	3	9	957M-3R-1-30	0.05	56.3		0.60		0.40	0.70	316.8	1.70	3.10	1.10	0.30
57	99-99	py	Py IV	4	15.6	3	9	957M-3R-1-30	4.80	1.60					0.02	121.2		2.10	0.10	
58	100-100	cpy	-	4	15.6	1	9	957M-3R-1-30	186.6	6.47	0.04	0.25				66.4			11.5	
59	102-102	cpy	-	4	15.6	1	9	957M-3R-1-30	232.3	2.76					0.04	68.5	6.50		7.24	
60	103-103	py	Py I	4	15.6	3	9	957M-3R-1-30	4.40	4.10		0.30		1.10	0.20	2052			0.70	
61	104-104	py	Py IV	4	15.6	3	9	957M-3R-1-30		1.60	0.03				0.30	90.2	77.7	4.90	0.60	0.30
62	105-105	py	Py IV	4	15.6	3	9	957M-3R-1-30		44.7		1.40	0.80	7.00		4.30			0.20	0.01
63	107-107	py	Py V	4	15.6	3	9	957M-3R-1-30	0.10	48.9		6.00	0.80	7.20	0.02	8.00	2.10		1.40	0.10
64	108-108	mc	-	4	15.6	1	9	957M-3R-1-30	0.08	2.16		0.06			0.06	45.8		2.99		0.03
65	111-111	py	Py V	4	15.6	3	9	957M-3R-1-30		1.40		0.20	0.90	0.80		0.10			0.05	
66	112-112	py	Py V	4	15.6	3	9	957M-3R-1-30		99.1	0.10	1.40		37.0		1.50	5.90		0.80	0.30
67	114-114	py	Py IV	4	15.6	3	9	957M-3R-1-30		129.1		0.10			0.03	1.60			0.60	0.01
68	115-115	py	Py IV	4	15.6	3	9	957M-3R-1-30		3.60		0.40	0.60	0.01		38.7		3.80		0.01
69	117-2	mc	-	4	15.6	1	5	957M-3R-1-30		52.0		1.32		15.0		24.2	4.60		0.30	0.01
70	119-4	cpy	-	4	15.6	1	5	957M-3R-1-30	40.1							32.1				0.04
71	120-5	mc	-	4	15.6	1	5	957M-3R-1-30	0.89	24.4				7.87	0.04	81.7			2.21	
72	123-8	cpy	-	4	15.6	1	5	957M-3R-1-30	35.5	4.84					0.13	38.7	11.2		4.97	
73	124-9	mc	-	4	15.6	1	5	957M-3R-1-30		221.6		1.11		0.47	0.51	108.8			1.51	0.04
74	126-11	cpy	-	4	15.6	1	5	957M-3R-1-30	73.4		0.09	0.19		0.06		77.4			2.59	
75	127-12	cpy	-	4	15.6	1	5	957M-3R-1-30	58.1						0.10	50.3		16.5	0.54	0.13
76	128-13	py	Py III	1	21.32	2	7	957C-7N-2-1D		1.50		0.40		0.20	0.20	737.9		28.2		0.02
77	129-14	py	Py III	1	21.32	2	7	957C-7N-2-1D		11.2			3.00		0.30	1816		106.8	0.60	0.01
78	131-16	py	Py III	1	21.32	2	7	957C-7N-2-1D	0.40	1.60	0.20			0.40		43.1	13.5			
79	132-17	py	Py III	1	21.32	2	7	957C-7N-2-1D		4.40	0.20					1586		139.6		
80	135-20	py	Py III	1	21.32	2	7	957C-7N-2-1D	0.30	4.50					0.10	129.7				
81	136-21	py	Py III	1	21.32	2	7	957C-7N-2-1D		82.1		1.30	1.50	7.60		89.7			5.40	0.60
82	138-23	py	Py III	1	21.32	2	7	957C-7N-2-1D		5.60				1.00		526.2		19.0	1.20	0.20
83	139-24	py	Py III	1	21.32	2	7	957C-7N-2-1D		33.0		1.70		1.30		127.4			1.40	2.50
84	140-25	py	Py I	1	43.34	3	10a	957C-15N-2-1D		22.2		0.10	1.10		0.40	552.4		24.0	0.10	0.20
85	141-26	py	Py VI	1	43.34	3	10a	957C-15N-2-1D		40.7		0.20		0.70	0.10	219.7			0.90	0.01
86	143-28	py	Py VI	1	43.34	3	10a	957C-15N-2-1D	0.20	26.7	0.04	0.20		1.30	0.03	146.1			0.70	0.30
87	144-29	py	Py III	1	43.34	3	10a	957C-15N-2-1D	0.10	0.60			2.60	0.01	0.10	134.3		29.1	0.30	1.20
88	147-32	py	Py III	1	43.34	3	10a	957C-15N-2-1D		10.6					0.10	475.2		10.2	0.10	
89	148-33	py	Py II	1	43.34	3	10a	957C-15N-2-1D		1.10		0.10		0.20		61.6	2.40			0.10
90	150-35	py	Py IV	1	43.34	3	10a	957C-15N-2-1D		5.60		0.10	0.50	0.10	0.10	701.5		76.4		0.002

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Fe	Cu	Zn	Pb	Au	Ag	As	Cd	Mn	Ga	Ge	In
91	151-36	py	Py IV	1	43.34	3	10a	957C-15N-2-1D		63.0	10.5	58.9		2.10	38.6		0.70		2.00	0.05
92	152-37	py	Py III	1	43.34	3	10a	957C-15N-2-1D		34.3	2.50	27.6		1.60	61.0		0.90	0.20		
93	153-38	py	Py III	1	43.34	3	10a	957C-15N-2-1D		54.2		11.0		0.50	49.4		0.50			
94	155-40	py	Py V	1	43.34	3	10a	957C-15N-2-1D		64.1		5.30			20.7		0.70			
95	159-44	py	Py V	1	43.34	3	10a	957C-15N-2-1D		7.60			0.40			0.50	0.30			
96	160-45	py	Py V	1	43.34	3	10a	957C-15N-2-1D		123.8					5.50	0.40	0.40			
97	162-47	py	Py IV	1	43.34	3	10a	957C-15N-2-1D		15.4	2.60	0.50	0.20	0.10	12.2		0.20		1.30	0.04
98	163-48	py	Py IV	1	43.34	3	10a	957C-15N-2-1D		4.80	1.70	0.30			12.6		0.30		1.30	
99	164-49	py	Py III	1	92	3	10a	957E-12R-1-4		52.0	4.90	3.00			6.20	0.40	1.10	0.30		
100	165-50	py	Py III	1	92	3	10a	957E-12R-1-4		100.6	3.00	0.60	0.30		2.10		0.30			
101	167-52	py	Py III	1	92	3	10a	957E-12R-1-4		73.3		21.3	0.40	0.20	27.6				3.60	0.04
102	168-53	py	Py III	1	92	3	10a	957E-12R-1-4		164.1	6.50	92.3		1.50	117.2	0.50	0.60			
103	171-56	py	Py I	1	92	3	10a	957E-12R-1-4		13.8		28.1		1.70	31.3		0.30	0.30		
104	172-57	py	Py VI	1	92	3	10a	957E-12R-1-4		352.5		19.6		1.40	1191				5.20	0.20
105	174-59	py	Py III	1	92	3	10a	957E-12R-1-4		310.7	3.70	35.3	0.40	0.80	516.2		1.00			
106	175-60	py	Py III	1	92	3	10a	957E-12R-1-4		281.2	2.50	91.6		2.90	143.9		1.80	7.20		0.50
107	176-61	py	Py III	1	92	3	10a	957E-12R-1-4		95.5	4.50	25.1		0.70	207.4					
108	177-62	py	Py VI	1	92	3	10a	957E-12R-1-4				8.50	4.50	0.90	27.5			5.90		3.00
109	180-65	py	Py I	1	92	3	10a	957E-12R-1-4		4.60		2.30		0.20	7.90		0.80			0.04
110	183-68	py	Py III	1	92	3	10a	957E-12R-1-4			1.00	0.10			3.30		0.30			
111	184-69	py	Py III	1	92	3	10a	957E-12R-1-4		76.1	2.50	55.3		1.10	191.4		0.40			0.10
112	186-71	py	Py III	1	92	3	10a	957E-12R-1-4		598.7	2.80	1.90	0.40		45.8		0.80	0.20		
113	187-72	py	Py III	1	92	3	10a	957E-12R-1-4		110.6	149.9	196.5		15.4	56.2		6.10			0.10
114	188-73	mc	-	4	14.61	1	5	957K-3X-1-3			35.6	10.8		0.29	7.22		7.27			
115	189-74	mc	-	4	14.61	1	5	957K-3X-1-3				159.7		0.31	7.98	1.61	7.62		9.77	
116	191-76	py	Py II	4	14.61	1	5	957K-3X-1-3		3.20		54.0			28.4	1.30	18.9	0.80		
117	192-77	mc	-	4	14.61	1	5	957K-3X-1-3		3.35	393.2	11.4			3.36	1.38	7.40	0.33		0.08
118	195-80	sph	-	4	14.61	1	5	957K-3X-1-3	12933	1428		106.1		178.1	90.0	1183	8.92	384.9	505.5	25.6
119	196-81	sph	-	4	14.61	1	5	957K-3X-1-3	33363	1099		85.3	0.73	50.4	90.9	1013	10.7	57.7	385.7	3.62
120	198-83	mc	-	4	14.61	1	5	957K-3X-1-3		36.6	139.4	9.2	0.46		59.8		13.2			0.05
121	199-84	py	Py IV	4	14.61	1	5	957K-3X-1-3		32.5	29.1	92.5		2.00	99.7		22.7	0.70		
122	200-85	sph	-	4	14.61	1	5	957K-3X-1-3	9385	2061		89.5		49.0	129.7	1408	6.06	670.4	680.4	30.5
123	201-86	sph	-	4	14.61	1	5	957K-3X-1-3	11397	1493		73.7	0.43	52.0	98.3	2155	6.74	558.9	415.6	14.2
124	203-88	sph	-	4	14.61	1	5	957K-3X-1-3	12151	3023		35.3	0.54	14.5	67.8	1566	8.62	1135	900.2	34.5
125	204-89	sph	-	4	14.61	1	5	957K-3X-1-3	45701	1741		15.8		9.11		1116	26.4	82.7	16.4	0.47
126	207-92	mc	-	4	14.61	1	5	957K-3X-1-3		19.3	897.7	1.37			9.48	1.04	9.03	0.81		
127	208-93	sph	-	4	14.61	1	5	957K-3X-1-3	44754	2184		238.5	0.61	33.6	5.85	1054	35.8	35.9	31.6	0.15
128	210-95	sph	-	4	14.61	1	5	957K-3X-1-3	54302	810.8		13.5	0.37	7.69		792.8	32.9	133.7	30.2	0.07
129	211-96	sph	-	4	14.61	1	5	957K-3X-1-3	51868	1138		9.12		8.07	4.13	2615	18.9	688.0	16.7	0.16
130	212-97	py	Py I	1	1.68	1	6	957F-1W-1-10D		166.8	1.20	2.80		0.20	8.40					
131	213-98	py	Py IV	1	1.68	1	6	957F-1W-1-10D		194.2	12.1	6.10		4.00	48.0		9.80			
132	215-100	py	Py V	1	1.68	1	6	957F-1W-1-10D		474.9	3.40	19.9		0.90	47.8		1.50			
133	216-101	py	Py VI	1	1.68	1	6	957F-1W-1-10D		96.6	5.40	0.90			13.4	1.00	0.50			
134	219-104	cpy	-	1	1.68	1	6	957F-1W-1-10D			45.4			4.64				24.4		9.00
135	220-105	cpy	-	1	1.68	1	6	957F-1W-1-10D			41.2			4.22		1.21	1.40	5.88	8.10	7.18



Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Sn	Mo	W	Sb	Te	Tl	Bi	Co	Ni	Se	V	U
91	151-36	py	Py IV	1	43.34	3	10a	957C-15N-2-1D		49.8		0.50	1.40	0.30	1.10	643.3	6.80	27.9	0.20	0.50
92	152-37	py	Py III	1	43.34	3	10a	957C-15N-2-1D		220.7		1.00	1.60	0.30	1.50	1828	10.2	62.9	0.60	0.10
93	153-38	py	Py III	1	43.34	3	10a	957C-15N-2-1D		3.90		0.30	1.90	0.03	0.05	641.9		19.6	0.20	
94	155-40	py	Py V	1	43.34	3	10a	957C-15N-2-1D		19.9			3.10	1.40	0.90	433.1		77.9		
95	159-44	py	Py V	1	43.34	3	10a	957C-15N-2-1D	0.30					0.03	0.10	672.3		41.4		
96	160-45	py	Py V	1	43.34	3	10a	957C-15N-2-1D	0.40	1.90			1.60		3.40	636.6		43.1	0.20	
97	162-47	py	Py IV	1	43.34	3	10a	957C-15N-2-1D		2.10		0.10	1.70	0.02	0.10	1169	3.50	33.1	0.40	0.02
98	163-48	py	Py IV	1	43.34	3	10a	957C-15N-2-1D		1.10	0.02	0.10			0.10	8.20	13.3			
99	164-49	py	Py III	1	92	3	10a	957E-12R-1-4		1.70	0.20	0.30		0.10	0.10	23.4			0.20	
100	165-50	py	Py III	1	92	3	10a	957E-12R-1-4		19.2					0.10					0.02
101	167-52	py	Py III	1	92	3	10a	957E-12R-1-4		25.0		0.30		0.20	0.10	198.1			0.70	0.03
102	168-53	py	Py III	1	92	3	10a	957E-12R-1-4		3.10		1.10		6.60	0.90	552.3	9.00		0.60	0.80
103	171-56	py	Py I	1	92	3	10a	957E-12R-1-4		42.6		0.40			0.80	1298	11.8	31.5		
104	172-57	py	Py VI	1	92	3	10a	957E-12R-1-4		12.5		3.50				49.8			0.50	
105	174-59	py	Py III	1	92	3	10a	957E-12R-1-4	0.50	8.30		2.30		2.80	2.60	241.4			0.80	0.10
106	175-60	py	Py III	1	92	3	10a	957E-12R-1-4		247.1		1.70		4.40	2.50	512.9	9.70	41.6	1.40	
107	176-61	py	Py III	1	92	3	10a	957E-12R-1-4				0.60				275.5		10.7		2.30
108	177-62	py	Py VI	1	92	3	10a	957E-12R-1-4		3.40	0.20	0.70	2.70		3.20	1092	15.8			
109	180-65	py	Py I	1	92	3	10a	957E-12R-1-4		24.7		0.30		0.10	0.10	760.5		13.9	0.10	
110	183-68	py	Py III	1	92	3	10a	957E-12R-1-4	0.10	0.30				0.01		3.90				1.50
111	184-69	py	Py III	1	92	3	10a	957E-12R-1-4	0.40	2.70		1.50		0.03	0.40	261.9		29.5	0.60	0.20
112	186-71	py	Py III	1	92	3	10a	957E-12R-1-4		1.80		0.50	1.90		1.10	503.7		61.0	0.20	
113	187-72	py	Py III	1	92	3	10a	957E-12R-1-4		18.1		0.80		1.80	0.50	81.6		12.6	0.20	0.10
114	188-73	mc	-	4	14.61	1	5	957K-3X-1-3		134.1		0.57		17.5					1.82	0.01
115	189-74	mc	-	4	14.61	1	5	957K-3X-1-3		113.1		3.05		15.7		1.32			4.46	0.03
116	191-76	py	Py II	4	14.61	1	5	957K-3X-1-3		190.7		1.40		25.4					6.60	0.10
117	192-77	mc	-	4	14.61	1	5	957K-3X-1-3		97.2		1.55		15.9					2.24	0.14
118	195-80	sph	-	4	14.61	1	5	957K-3X-1-3	1.27	0.78		41.2		0.36	0.07	16.2			0.43	
119	196-81	sph	-	4	14.61	1	5	957K-3X-1-3		3.63		28.9		0.84		13.9	11.8		1.39	
120	198-83	mc	-	4	14.61	1	5	957K-3X-1-3		116.0	0.29	1.88		3.54		1.00			1.06	0.26
121	199-84	py	Py IV	4	14.61	1	5	957K-3X-1-3	0.40	96.5	0.10	7.90		20.6		15.4			2.30	0.20
122	200-85	sph	-	4	14.61	1	5	957K-3X-1-3	7.13		0.07	28.8		0.33		16.8			0.22	0.01
123	201-86	sph	-	4	14.61	1	5	957K-3X-1-3	1.72	1.07		64.4		0.08		18.3				0.02
124	203-88	sph	-	4	14.61	1	5	957K-3X-1-3	4.46	0.59	0.08	66.4		0.18		21.4				
125	204-89	sph	-	4	14.61	1	5	957K-3X-1-3	7.86	1.39		1.26		0.20		113.8			0.51	0.48
126	207-92	mc	-	4	14.61	1	5	957K-3X-1-3		125.3		2.78		17.9		0.73		12.7	3.88	0.12
127	208-93	sph	-	4	14.61	1	5	957K-3X-1-3	0.32	6.34		120.6		0.23		7.69				
128	210-95	sph	-	4	14.61	1	5	957K-3X-1-3	0.37			3.35				41.4			1.02	
129	211-96	sph	-	4	14.61	1	5	957K-3X-1-3	2.82	4.27		8.44				8.92				0.06
130	212-97	py	Py I	1	1.68	1	6	957F-1W-1-10D		1.00					0.02	6.80				
131	213-98	py	Py IV	1	1.68	1	6	957F-1W-1-10D		47.7		1.40		2.70		27.8		13.1	0.70	0.10
132	215-100	py	Py V	1	1.68	1	6	957F-1W-1-10D		28.2				1.70	0.03	9.80			0.30	0.10
133	216-101	py	Py VI	1	1.68	1	6	957F-1W-1-10D		1.90				0.40		15.1	7.20			0.10
134	219-104	cpy	-	1	1.68	1	6	957F-1W-1-10D	92.2	18.1		0.77		0.24		9.72			0.54	
135	220-105	cpy	-	1	1.68	1	6	957F-1W-1-10D	190.2	1.43					0.06	7.87				0.21

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Fe	Cu	Zn	Pb	Au	Ag	As	Cd	Mn	Ga	Ge	In
136	222-107	cpy	-	1	1.68	1	6	957F-1W-1-10D			39.1		0.54	3.60			0.80	7.80		1.93
137	223-108	cpy	-	1	1.68	1	6	957F-1W-1-10D			43.1	0.14	0.60	5.23		3.50		6.11	10.9	2.22
138	224-109	py	Py I	1	1.68	1	6	957F-1W-1-10D	105.7			4.60		0.20	30.4					
139	225-110	py	Py V	1	1.68	1	6	957F-1W-1-10D	442.0		24.9	39.7	0.50	3.10	34.4	1.00	3.90	0.40	5.50	
140	227-112	py	Py V	1	1.68	1	6	957F-1W-1-10D	706.0		1041	5.80	0.80	0.50	560.8		4.00		6.10	0.30
141	228-113	py	Py V	1	1.68	1	6	957F-1W-1-10D	686.3		480.4	29.4	0.90	12.8	73.3		85.9	0.60	11.8	
142	231-116	py	Py VI	1	1.68	1	6	957F-1W-1-10D	29.5		378.0	3.00					1.60			
143	232-117	cpy	-	1	1.68	1	6	957F-1W-1-10D			36.8	0.10	0.79	3.70		1.56	1.15	23.9	12.0	6.32
144	234-119	py	Py V	1	1.68	1	6	957F-1W-1-10D	20.0		50.0	1.60	0.50	0.40	35.4		1.00		8.60	
145	235-120	py	Py V	1	1.68	1	6	957F-1W-1-10D	524.6		26.9	21.5		1.80	28.2		2.80			
146	236-121	py	Py VI	1	1.68	1	6	957F-1W-1-10D	280.1		150.5	17.5			39.9	1.40	0.60		7.10	0.04
147	237-122	mc	-	1	1.68	1	6	957F-1W-1-10D	379.3		17.8	25.1		1.52	48.5	0.34	1.92			
148	239-124	py	Py IV	1	1.68	1	6	957F-1W-1-10D	4.20		136.6	0.40			5.00		0.50	0.20		0.10
149	240-125	mc	-	1	1.68	1	6	957F-1W-1-10D	4.42		2.20			0.13	6.33		0.81			
150	243-128	mc	-	1	1.68	1	6	957F-1W-1-10D	3.37				0.61		1.90		0.39	0.32		
151	244-129	cpy	-	1	1.68	1	6	957F-1W-1-10D			52.1			5.80			1.88	4.72		2.07
152	246-131	cpy	-	1	1.68	1	6	957F-1W-1-10D			36.3	0.09		4.86	2.40	0.93		20.7	23.8	8.43
153	247-132	cpy	-	1	1.68	1	6	957F-1W-1-10D			49.4	0.12		3.59			0.67	18.3	9.27	11.2
154	249-2	py	Py IV	1	32.19	2	8	957C-11N-2-1B	269.4		12.0	8.60	0.30	0.30	12.2		10.3	0.20		
155	251-4	py	Py IV	1	32.19	2	8	957C-11N-2-1B	618.9		1.40	15.1	0.10	0.40	11.1		0.70	0.30	1.20	0.02
156	252-5	cpy	-	1	32.19	2	8	957C-11N-2-1B			74.7	0.30		2.82				183.5	15.0	2.76
157	255-8	cpy	-	1	32.19	2	8	957C-11N-2-1B			37.3			2.26		0.82	1.54	33.4	14.8	2.60
158	256-9	cpy	-	1	32.19	2	8	957C-11N-2-1B			34.3	0.03	0.19	2.28			1.21	3.12	3.02	2.72
159	258-11	cpy	-	1	32.19	2	8	957C-11N-2-1B			43.2	0.09		2.51		0.60	1.04	13.6		3.84
160	259-12	cpy	-	1	32.19	2	8	957C-11N-2-1B			38.1			3.77			0.97	6.60	7.43	7.81
161	260-13	cpy	-	1	32.19	2	8	957C-11N-2-1B			34.6		0.23	2.18			1.09	30.9	75.1	5.50
162	261-14	py	Py IV	1	32.19	2	8	957C-11N-2-1B	25.1		0.50	0.04					0.40			
163	263-16	py	Py IV	1	32.19	2	8	957C-11N-2-1B	128.1		1.50	9.00		0.10	9.60	0.30	0.50			
164	264-17	py	Py IV	1	32.19	2	8	957C-11N-2-1B	72.8		2.00	0.10		0.20	1.30		0.70			
165	267-20	cpy	-	1	32.19	2	8	957C-11N-2-1B			34.2	0.21		2.67		1.31	1.94	44.6	12.2	2.78
166	268-21	cpy	-	1	32.19	2	8	957C-11N-2-1B			28.6	0.10		2.31	3.81	0.77	1.43	8.73		2.55
167	270-23	py	Py IV	1	32.19	2	8	957C-11N-2-1B	57.9						2.40		0.50			
168	271-24	py	Py IV	1	32.19	2	8	957C-11N-2-1B	92.1		1.20	1.40			7.10		0.30			
169	272-25	py	Py IV	1	32.19	2	8	957C-11N-2-1B	44.0						1.40					
170	273-26	cpy	-	1	32.19	2	8	957C-11N-2-1B			29.1			3.06		1.08	1.37	5.86	3.35	5.18
171	275-28	cpy	-	1	32.19	2	8	957C-11N-2-1B			35.8	0.03		3.39			1.09	1.88		3.86
172	276-29	cpy	-	1	32.19	2	8	957C-11N-2-1B			32.2			3.09	3.08	0.75	1.24	11.9	19.3	4.71
173	279-32	py	Py IV	1	32.19	2	8	957C-11N-2-1B	46.2		1.40	0.03			3.80		0.40	0.10	1.70	
174	280-33	py	Py IV	1	32.19	2	8	957C-11N-2-1B	72.9			0.04		0.20	4.20	0.30	0.20	0.20		
175	282-35	py	Py VI	1	32.19	2	8	957C-11N-2-1B	41.5		1.20	0.10			8.60			0.20		
176	283-36	py	Py V	1	32.19	2	8	957C-11N-2-1B	14.2			0.10			6.90		0.70	0.10		0.02
177	284-37	py	Py V	1	32.19	2	8	957C-11N-2-1B	28.2			0.10			5.00					
178	285-38	py	Py I	1	32.19	2	8	957C-11N-2-1B	289.9				0.10		1.40		1.10	0.20		
179	287-40	py	Py V	1	32.19	2	8	957C-11N-2-1B	40.7						1.20	0.30			2.50	
180	288-41	py	Py I	1	32.19	2	8	957C-11N-2-1B	8.40		1.50	0.50	0.20		3.40					

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Sn	Mo	W	Sb	Te	Tl	Bi	Co	Ni	Se	V	U
136	222-107	cpy	-	1	1.68	1	6	957F-1W-1-10D	9.11							5.28	7.74	10.9	0.36	0.02
137	223-108	cpy	-	1	1.68	1	6	957F-1W-1-10D	10.6	1.06						5.47		12.6	0.34	
138	224-109	py	Py I	1	1.68	1	6	957F-1W-1-10D		7.90	0.20	0.30			0.20	444.7		18.0		0.01
139	225-110	py	Py V	1	1.68	1	6	957F-1W-1-10D		60.1		1.90	3.70	2.20		90.0			0.80	0.20
140	227-112	py	Py V	1	1.68	1	6	957F-1W-1-10D	0.40	8.00	0.10			0.40		141.6			5.70	0.10
141	228-113	py	Py V	1	1.68	1	6	957F-1W-1-10D		11.1		3.80		1.50		79.9			1.00	0.20
142	231-116	py	Py VI	1	1.68	1	6	957F-1W-1-10D		9.00						1.60				0.20
143	232-117	cpy	-	1	1.68	1	6	957F-1W-1-10D	11.8	11.4					0.09	5.84		30.8	0.64	0.03
144	234-119	py	Py V	1	1.68	1	6	957F-1W-1-10D	0.50	2.50		0.70	3.50			1.00				0.10
145	235-120	py	Py V	1	1.68	1	6	957F-1W-1-10D	0.20	35.7	0.20	1.50		3.90		108.2			0.80	0.10
146	236-121	py	Py VI	1	1.68	1	6	957F-1W-1-10D		6.70		0.70		0.30		358.9		5.00		0.10
147	237-122	mc	-	1	1.68	1	6	957F-1W-1-10D		11.9		1.15		1.00		5.35	4.15		0.63	0.36
148	239-124	py	Py IV	1	1.68	1	6	957F-1W-1-10D		0.50						0.20		6.40	0.20	
149	240-125	mc	-	1	1.68	1	6	957F-1W-1-10D		0.65	0.06					2.02		5.71	0.14	
150	243-128	mc	-	1	1.68	1	6	957F-1W-1-10D								0.23	5.07	5.24	0.26	
151	244-129	cpy	-	1	1.68	1	6	957F-1W-1-10D	8.66			0.64				4.56		32.1		
152	246-131	cpy	-	1	1.68	1	6	957F-1W-1-10D	151.8	4.32						7.89			0.52	0.01
153	247-132	cpy	-	1	1.68	1	6	957F-1W-1-10D	19.7							2.82		10.4	0.58	
154	249-2	py	Py IV	1	32.19	2	8	957C-11N-2-1B		154.7		0.60		1.10	0.20	16.6	9.70		1.90	9.00
155	251-4	py	Py IV	1	32.19	2	8	957C-11N-2-1B	0.10	4.10	0.02	0.30		0.50	0.20	134.7	2.30		0.30	0.40
156	252-5	cpy	-	1	32.19	2	8	957C-11N-2-1B	11.1			0.51				12.3				0.05
157	255-8	cpy	-	1	32.19	2	8	957C-11N-2-1B	10.9	7.69		0.17	2.15	0.03		23.5		9.25	0.45	1.28
158	256-9	cpy	-	1	32.19	2	8	957C-11N-2-1B	28.2							22.9				0.003
159	258-11	cpy	-	1	32.19	2	8	957C-11N-2-1B	23.3	1.51					0.03	21.4			0.48	0.01
160	259-12	cpy	-	1	32.19	2	8	957C-11N-2-1B	3.08	13.9		0.16				33.4			2.14	
161	260-13	cpy	-	1	32.19	2	8	957C-11N-2-1B	4.23	1.80				0.03		26.9			0.46	0.003
162	261-14	py	Py IV	1	32.19	2	8	957C-11N-2-1B	0.10						0.02	3.30		5.30	0.10	0.70
163	263-16	py	Py IV	1	32.19	2	8	957C-11N-2-1B		5.40		0.30		0.30	0.01	101.8	1.80	2.00	0.20	0.10
164	264-17	py	Py IV	1	32.19	2	8	957C-11N-2-1B	0.10	0.70				0.02		9.90			0.20	0.01
165	267-20	cpy	-	1	32.19	2	8	957C-11N-2-1B	12.4	1.49		0.17				14.4	9.25	11.5	1.00	0.08
166	268-21	cpy	-	1	32.19	2	8	957C-11N-2-1B	20.2						0.05	21.4		24.9	0.27	
167	270-23	py	Py IV	1	32.19	2	8	957C-11N-2-1B	0.10						0.02	67.6		7.70		
168	271-24	py	Py IV	1	32.19	2	8	957C-11N-2-1B		1.90		0.20				144.3	3.20	13.0		
169	272-25	py	Py IV	1	32.19	2	8	957C-11N-2-1B	0.10							216.7		20.1		
170	273-26	cpy	-	1	32.19	2	8	957C-11N-2-1B	27.9	4.49						31.6			3.02	
171	275-28	cpy	-	1	32.19	2	8	957C-11N-2-1B	31.0	1.02						20.2		11.3		
172	276-29	cpy	-	1	32.19	2	8	957C-11N-2-1B	14.4				1.64			21.7		19.3	1.11	
173	279-32	py	Py IV	1	32.19	2	8	957C-11N-2-1B		0.40				0.01		60.6	2.60			
174	280-33	py	Py IV	1	32.19	2	8	957C-11N-2-1B	0.10	2.10	0.05					93.3		2.80	0.20	
175	282-35	py	Py VI	1	32.19	2	8	957C-11N-2-1B				0.10		0.04		47.1				0.10
176	283-36	py	Py V	1	32.19	2	8	957C-11N-2-1B	0.20	0.50	0.04			0.02		399.7	6.40	21.1		
177	284-37	py	Py V	1	32.19	2	8	957C-11N-2-1B				0.20	4.60	0.03	0.20	1177		47.1		
178	285-38	py	Py I	1	32.19	2	8	957C-11N-2-1B		2.20		0.20			0.30	1358	5.30	68.4		
179	287-40	py	Py V	1	32.19	2	8	957C-11N-2-1B		2.40	0.02	0.10			0.02	417.1		8.80		0.01
180	288-41	py	Py I	1	32.19	2	8	957C-11N-2-1B		0.50						39.4	115.1			

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Fe	Cu	Zn	Pb	Au	Ag	As	Cd	Mn	Ga	Ge	In
181	291-44	py	Py IV	1	32.19	2	8	957C-11N-2-1B		51.2		1.30		0.10	4.30					
182	292-45	py	Py VI	1	32.19	2	8	957C-11N-2-1B		210.7	2.50	7.30	0.20	0.70	17.6		0.60			
183	294-47	py	Py V	1	32.19	2	8	957C-11N-2-1B		24.4		0.05			2.90					
184	295-48	py	Py IV	1	32.19	2	8	957C-11N-2-1B		288.7	1.70				5.00		0.80			
185	296-49	py	Py I	1	21.05	2	7	957G-3N-1-6		185.7	8.20	7.60		0.20	20.6		0.90	0.10		
186	297-50	py	Py IV	1	21.05	2	7	957G-3N-1-6		423.8	242.0	126.5	0.10	1.60	70.5		7.90		1.70	
187	299-52	py	Py IV	1	21.05	2	7	957G-3N-1-6		23.5	1.50	4.70		0.10	47.5		0.90		2.80	
188	300-53	py	Py IV	1	21.05	2	7	957G-3N-1-6		591.3	9.80	44.3	0.90	2.70	101.3		1.40	1.20		
189	303-56	cpy	-	1	21.05	2	7	957G-3N-1-6			28.3	23.1		14.1				3.67		8.92
190	306-59	py	Py IV	1	21.05	2	7	957G-3N-1-6		466.2	1893	84.4	0.40	1.60	139.3	5.70	21.8	0.70		0.10
191	307-60	py	Py IV	1	21.05	2	7	957G-3N-1-6		179.0		81.3		0.80	75.4	3.00	3.20	0.40		0.04
192	308-61	cpy	-	1	21.05	2	7	957G-3N-1-6				10.4		11.8	12.0			54.7		11.8
193	309-62	py	Py IV	1	21.05	2	7	957G-3N-1-6		288.5	0.60	1.60			3.80	1.00	0.40	0.10		
194	311-64	py	Py I	1	21.05	2	7	957G-3N-1-6		223.8	92.0	11.8	0.10	0.20	51.2		1.20	0.20		
195	312-65	py	Py IV	1	21.05	2	7	957G-3N-1-6				0.80	0.20	0.20			0.50	0.50	2.90	0.10
196	315-68	py	Py IV	1	21.05	2	7	957G-3N-1-6		332.2	1.30	4.00		0.30	39.2	0.40	0.60	0.10	2.60	
197	316-69	py	Py IV	1	21.05	2	7	957G-3N-1-6		547.6	1.60	4.20		0.80	23.5			0.10		0.02
198	318-71	py	Py IV	1	21.05	2	7	957G-3N-1-6		86.4	23.7	5.10	0.10	0.20	17.3		0.60		1.30	
199	319-72	py	Py IV	1	21.05	2	7	957G-3N-1-6		52.6	1.20	18.5		0.80	44.0		0.40	0.10	1.30	
200	320-73	py	Py I	5	35.37	1	5	957P-8R-1-7		44.5	1.90				9.50				6.70	
201	321-74	py	Py IV	5	35.37	1	5	957P-8R-1-7		65.4	12.2	0.60			6.00		1.00	0.20	5.50	
202	323-76	py	Py V	5	35.37	1	5	957P-8R-1-7		86.7	30.2	1.40		0.50	146.7		0.80			
203	324-77	py	Py I	5	35.37	1	5	957P-8R-1-7		103.2	3.70	12.3		1.60	297.7					0.10
204	327-80	py	Py VI	5	35.37	1	5	957P-8R-1-7		21.6	76.1	2.30		1.20	139.1	0.90	1.20		0.10	
205	328-81	py	Py IV	5	35.37	1	5	957P-8R-1-7		13.4	4.70	0.60	0.50		3.10			0.20		
206	330-83	cpy	-	5	35.37	3	10a	957P-8R-1-7			919.2	56.1		20.5				34.1		37.6
207	331-84	py	Py IV	5	35.37	1	5	957P-8R-1-7		12.7		0.10			1.60	0.50	1.00			0.10
208	332-85	py	Py V	5	35.37	1	5	957P-8R-1-7		24.3	2.40	0.10			1.90		0.80			
209	333-86	py	Py IV	5	35.37	1	5	957P-8R-1-7		25.9			0.20	0.10			0.30		5.10	
210	335-88	py	Py I	5	35.37	1	5	957P-8R-1-7		22.1				0.20			1.00	0.20		
211	336-89	py	Py IV	5	35.37	1	5	957P-8R-1-7		81.4	9.80	5.20	0.30	0.50	263.7		0.80			
212	339-92	cpy	-	5	35.37	3	10a	957P-8R-1-7			273.5	7.27		13.8	6.71	5.07		2.69		7.12
213	340-93	cpy	-	5	35.37	3	10a	957P-8R-1-7			39.8		0.67	4.43				1.70		7.82
214	342-95	cpy	-	5	35.37	3	10a	957P-8R-1-7			50.2			8.83				6.10	22.8	13.4
215	343-96	py	Py IV	5	35.37	1	5	957P-8R-1-7		51.9				0.10			0.90			
216	344-97	py	Py V	5	35.37	1	5	957P-8R-1-7		19.2		89.4	0.70	1.30	69.0	0.90				
217	347-100	cpy	-	5	35.37	3	10a	957P-8R-1-7			139.1			9.71	11.8			1.68		6.70
218	354-107	cpy	-	5	35.37	3	10a	957P-8R-1-7			35.7			5.69		1.55		2.53		7.31
219	355-108	cpy	-	5	35.37	3	10a	957P-8R-1-7			121.9			4.41		3.14	1.30	2.93		8.70
220	345-98	py	Py I	5	35.37	1	5	957P-8R-1-7		36.7		2.10			16.3				7.40	
221	351-104	py	Py I	5	35.37	1	5	957P-8R-1-7		15.6	1.20			0.20	5.00	1.10	0.80			0.02
222	366-1	py	Py IV	1	116.19	4	10b	957E-17R-1-3		35.7		0.20	0.20	0.30	10.7		0.60			0.10
223	367-2	cpy	-	1	116.19	4	10b	957E-17R-1-3			72.3	3.92		3.72	5.30					0.83
224	369-4	py	Py IV	1	116.19	4	10b	957E-17R-1-3		9.70	2.30				6.10		0.50	0.30		
225	370-5	py	Py IV	1	116.19	4	10b	957E-17R-1-3		15.8	5.20	0.50		0.20	1.10		1.50	0.10	1.80	0.03

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Sn	Mo	W	Sb	Te	Tl	Bi	Co	Ni	Se	V	U
181	291-44	py	Py IV	1	32.19	2	8	957C-11N-2-1B		67.2	0.04	0.10	1.20	0.20	0.10	71.6			0.10	0.03
182	292-45	py	Py VI	1	32.19	2	8	957C-11N-2-1B	0.20	4.00		0.40		0.10		101.0			0.20	0.10
183	294-47	py	Py V	1	32.19	2	8	957C-11N-2-1B		152.9					0.10	41.1		7.30	0.30	
184	295-48	py	Py IV	1	32.19	2	8	957C-11N-2-1B		3.50					0.20	0.50	5.00	7.20		
185	296-49	py	Py I	1	21.05	2	7	957G-3N-1-6		12.6	0.03	0.30		1.10		882.4		98.1	0.30	0.01
186	297-50	py	Py IV	1	21.05	2	7	957G-3N-1-6		92.1	0.03	1.60		7.70	0.02	30.5			1.50	0.70
187	299-52	py	Py IV	1	21.05	2	7	957G-3N-1-6		2.00		0.30		0.10	0.20	2147		79.7	0.20	0.04
188	300-53	py	Py IV	1	21.05	2	7	957G-3N-1-6		7.30				0.90		23.3			0.50	0.30
189	303-56	cpy	-	1	21.05	2	7	957G-3N-1-6	30.7			2.58					39.7			2.13
190	306-59	py	Py IV	1	21.05	2	7	957G-3N-1-6	0.10	70.0	0.03	5.60		3.80	0.10	114.2	3.30		1.30	1.80
191	307-60	py	Py IV	1	21.05	2	7	957G-3N-1-6		13.8		3.70		3.20	0.02	216.1		10.3	0.50	0.30
192	308-61	cpy	-	1	21.05	2	7	957G-3N-1-6	30.1			2.16	12.3			5.96			3.44	5.20
193	309-62	py	Py IV	1	21.05	2	7	957G-3N-1-6		4.70	0.02	0.10		0.20		297.9	1.80	9.80	0.20	0.01
194	311-64	py	Py I	1	21.05	2	7	957G-3N-1-6		34.3		1.50		2.60	0.10	227.5	2.80	6.40	0.30	0.40
195	312-65	py	Py IV	1	21.05	2	7	957G-3N-1-6	0.20		0.10	0.30			0.10	250.8		12.3	0.30	0.70
196	315-68	py	Py IV	1	21.05	2	7	957G-3N-1-6		5.10	0.10	0.30		0.50	0.05	296.0	4.50	3.30	0.90	0.03
197	316-69	py	Py IV	1	21.05	2	7	957G-3N-1-6	0.10	2.00	0.05	0.30	0.50	0.03	2.40	162.3		11.4	0.20	0.02
198	318-71	py	Py IV	1	21.05	2	7	957G-3N-1-6		6.00	0.02	0.10		0.10	0.20	538.8	5.50	7.80	0.20	0.02
199	319-72	py	Py IV	1	21.05	2	7	957G-3N-1-6		5.00		0.20	0.40	0.10	0.60	351.3		10.3	0.40	0.10
200	320-73	py	Py I	5	35.37	1	5	957P-8R-1-7								808.4		18.9	0.20	
201	321-74	py	Py IV	5	35.37	1	5	957P-8R-1-7	0.20			0.30	3.10			396.9		20.5		0.10
202	323-76	py	Py V	5	35.37	1	5	957P-8R-1-7		21.8				0.10		63.7			2.20	0.20
203	324-77	py	Py I	5	35.37	1	5	957P-8R-1-7		1.80		23.8		0.05	0.03	6775				0.01
204	327-80	py	Py VI	5	35.37	1	5	957P-8R-1-7		3.60	0.10	0.20				288.5	9.60		2.30	0.10
205	328-81	py	Py IV	5	35.37	1	5	957P-8R-1-7	0.30			0.20	2.60			12.5		44.3		0.10
206	330-83	cpy	-	5	35.37	3	10a	957P-8R-1-7	7.84	5.40			6.20	0.19	2.31					0.56
207	331-84	py	Py IV	5	35.37	1	5	957P-8R-1-7			0.10							62.0		0.02
208	332-85	py	Py V	5	35.37	1	5	957P-8R-1-7		0.40				0.03		666.9		27.3		
209	333-86	py	Py IV	5	35.37	1	5	957P-8R-1-7		5.40						227.2		28.0		0.01
210	335-88	py	Py I	5	35.37	1	5	957P-8R-1-7			0.05					174.0	7.70	25.1	0.20	
211	336-89	py	Py IV	5	35.37	1	5	957P-8R-1-7		8.50		0.50		0.20		58.0		5.30	0.40	0.04
212	339-92	cpy	-	5	35.37	3	10a	957P-8R-1-7	21.2				11.9			2.45	27.9			0.24
213	340-93	cpy	-	5	35.37	3	10a	957P-8R-1-7	28.0			0.38			0.16			21.4	0.50	
214	342-95	cpy	-	5	35.37	3	10a	957P-8R-1-7	38.7									1.03		
215	343-96	py	Py IV	5	35.37	1	5	957P-8R-1-7			0.10				0.04	43.1	6.90	83.5	0.20	
216	344-97	py	Py V	5	35.37	1	5	957P-8R-1-7		207.8		4.30		0.05		142.2			0.20	0.01
217	347-100	cpy	-	5	35.37	3	10a	957P-8R-1-7	23.7							3.10	32.7			
218	354-107	cpy	-	5	35.37	3	10a	957P-8R-1-7	32.2											0.01
219	355-108	cpy	-	5	35.37	3	10a	957P-8R-1-7	30.5											0.05
220	345-98	py	Py I	5	35.37	1	5	957P-8R-1-7		6.80				0.10		133.1		54.3		0.03
221	351-104	py	Py I	5	35.37	1	5	957P-8R-1-7		1.30						96.9		41.2	0.10	
222	366-1	py	Py IV	1	116.19	4	10b	957E-17R-1-3	0.20	0.30	0.10	0.10	3.60		0.20	814.6	9.10	58.1	0.10	0.10
223	367-2	cpy	-	1	116.19	4	10b	957E-17R-1-3	3.22							143.6		852.5		
224	369-4	py	Py IV	1	116.19	4	10b	957E-17R-1-3	0.30	13.7	0.05		1.60		0.50	1319	163.8	22.4	8.10	0.80
225	370-5	py	Py IV	1	116.19	4	10b	957E-17R-1-3	0.20	0.70			1.50		1.50	848.3	212.8	23.1	5.30	0.40

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Fe	Cu	Zn	Pb	Au	Ag	As	Cd	Mn	Ga	Ge	In
226	373-8	py	Py IV	1	116.19	4	10b	957E-17R-1-3		12.8	14.0	30.4		0.60	26.4		0.50			
227	374-9	py	Py VI	1	116.19	4	10b	957E-17R-1-3		4.20		4.00		0.10	17.7	0.30	0.40		0.90	
228	376-11	py	Py IV	1	116.19	4	10b	957E-17R-1-3		18.9	7.50	66.6	0.50	0.70	48.6		5.80			0.10
229	377-12	py	Py IV	1	116.19	4	10b	957E-17R-1-3		9.30	0.50	0.10			33.5	0.40	0.40	0.20		0.02
230	378-13	py	Py IV	1	116.19	4	10b	957E-17R-1-3		6.30	0.70	0.20					0.80	0.20		0.20
231	379-14	py	Py IV	1	116.19	4	10b	957E-17R-1-3		46.1	1.10	0.10			2.10	0.30	0.40			
232	381-16	py	Py I	1	116.19	4	10b	957E-17R-1-3		12.7	21.6	14.2			15.1		0.40			
233	382-17	py	Py III	1	116.19	4	10b	957E-17R-1-3		4.60		0.20			4.10		0.60			
234	385-20	py	Py IV	1	116.19	4	10b	957E-17R-1-3		8.70		0.90		0.10	42.4		3.10	0.10		0.20
235	386-21	py	Py IV	1	116.19	4	10b	957E-17R-1-3		27.2	0.70	0.10	0.10		8.50	0.20	0.20		2.40	
236	388-23	py	Py IV	1	116.19	4	10b	957E-17R-1-3		50.4		52.4		0.60	37.9		0.60			
237	389-24	py	Py I	1	116.19	4	10b	957E-17R-1-3		35.8		0.50					0.70	0.20		
238	390-25	py	Py I	1	116.19	4	10b	957E-17R-1-3		11.1	1.80	0.20			1.70					
239	391-26	py	Py IV	1	116.19	4	10b	957E-17R-1-3		14.9	12.2	2.50			11.9					
240	393-28	py	Py IV	1	116.19	4	10b	957E-17R-1-3		140.3		17.4		0.50	29.6					
241	394-29	py	Py III	1	116.19	4	10b	957E-17R-1-3		94.9	15.2	0.20			6.30		0.50			
242	397-32	py	Py IV	1	116.19	4	10b	957E-17R-1-3		9.50	1.70	2.70		0.30	7.80	0.40				0.10
243	398-33	py	Py IV	1	116.19	4	10b	957E-17R-1-3		2.20	1.50	0.10		0.30			0.60		4.60	
244	400-35	py	Py I	1	116.19	4	10b	957E-17R-1-3		65.1		42.1		2.30	126.2	5.00	0.60	0.50		0.80
245	401-36	py	Py VI	1	116.19	4	10b	957E-17R-1-3		12.2		8.90			4.40	1.40				
246	402-37	py	Py V	4	34.3	0	3	957M-7R-1-1		379.1	24.5	504.6		13.6	66.5		1.50	0.30		
247	403-38	py	Py V	4	34.3	0	3	957M-7R-1-1		99.2	7.30	374.5		4.60	5.80		3.20			0.10
248	405-40	py	Py VI	4	34.3	0	3	957M-7R-1-1		107.0	1.20	9.30	0.30	0.20	10.6		0.50	0.30		0.10
249	406-41	py	Py I	4	34.3	0	3	957M-7R-1-1		134.2	5.70	19.1		1.20	40.0		1.60			
250	409-44	py	Py I	4	34.3	0	3	957M-7R-1-1		125.6	1.60	1.50			3.00		0.50			0.04
251	410-45	py	Py VI	4	34.3	0	3	957M-7R-1-1			17.4	10.0	1.30	1.70	79.5		1.20	0.40		0.80
252	412-47	py	Py V	4	34.3	0	3	957M-7R-1-1		303.8	29.4	267.7	0.30	6.60	109.5		1.20		4.30	
253	413-48	cpy	-	4	34.3	0	3	957M-7R-1-1			25.9	1.39				9.62	3.93	64.8	69.5	5.67
254	414-49	py	Py V	4	34.3	0	3	957M-7R-1-1		81.0	69.9	580.2		5.50	5.00		6.60			0.10
255	415-50	py	Py I	4	34.3	0	3	957M-7R-1-1		158.5		0.40			3.40	0.20	0.30			
256	417-52	py	Py IV	4	34.3	0	3	957M-7R-1-1		50.2		3.60			3.80		1.30			0.10
257	418-53	py	Py I	4	34.3	0	3	957M-7R-1-1		30.8	30.4	69.5			51.3		6.00			
258	421-56	cpy	-	4	34.3	0	3	957M-7R-1-1			119.9	1.07	2.55					4.47		11.3
259	422-57	cpy	-	4	34.3	0	3	957M-7R-1-1			1967	20.8		1.48				12.1	18.0	10.5
260	424-59	cpy	-	4	34.3	0	3	957M-7R-1-1			43.9	4.09			12.4			14.5		15.4
261	425-60	py	Py IV	4	34.3	0	3	957M-7R-1-1			1.00			0.10	2.70	0.50	0.40		1.50	0.01
262	426-61	py	Py IV	2	10.19	1	5	957A-3X-1-4		66.2	27.9	119.4		7.30	21.4		1.30			0.40
263	430-65	py	Py IV	2	10.19	1	5	957A-3X-1-4			50.8	23.5	0.60		15.1		21.8			
264	433-68	py	Py IV	2	10.19	1	5	957A-3X-1-4		575.1	25.3	301.3	1.70	102.1	153.4		3.10		20.3	
265	434-69	sph	-	2	10.19	0	4	957A-3X-1-4	6159	549.2		31.1		27.1	12.1	551.0	5.93	231.1	50.5	0.90
266	436-71	sph	-	2	10.19	0	4	957A-3X-1-4	4449	585.5		28.9		10.7	10.4	709.1	3.08	361.2	139.0	0.48
267	437-72	py	Py IV	2	10.19	1	5	957A-3X-1-4		6.30	111.1	34.1		0.70	12.5	1.10	120.9		6.70	0.05
268	438-73	py	Py IV	4	38.51	3	10a	957M-8R-1-5		2.30					1.10		0.50			
269	439-74	py	Py VI	4	38.51	3	10a	957M-8R-1-5		17.6	1.80				67.3	0.70	0.70	0.30		0.10
270	441-76	py	Py IV	4	38.51	3	10a	957M-8R-1-5		40.5	3.00	12.4	1.20		105.9					

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Sn	Mo	W	Sb	Te	Tl	Bi	Co	Ni	Se	V	U
226	373-8	py	Py IV	1	116.19	4	10b	957E-17R-1-3		43.3		0.40	2.10	0.80	0.10	850.3	10.5	24.9	0.40	3.00
227	374-9	py	Py VI	1	116.19	4	10b	957E-17R-1-3		3.40		0.10	2.30	0.10	0.10	1125	4.40	23.9		0.10
228	376-11	py	Py IV	1	116.19	4	10b	957E-17R-1-3		30.3		4.60		75.7		3.10	10.8		0.20	0.01
229	377-12	py	Py IV	1	116.19	4	10b	957E-17R-1-3		0.70		0.50				659.0	5.10	80.0	0.10	0.002
230	378-13	py	Py IV	1	116.19	4	10b	957E-17R-1-3	0.30		0.40	0.30		0.04	0.50	30.0	5.50	4.10	0.30	0.20
231	379-14	py	Py IV	1	116.19	4	10b	957E-17R-1-3		0.40					0.03	1251	4.10	58.9	0.10	
232	381-16	py	Py I	1	116.19	4	10b	957E-17R-1-3		6.00		0.10	2.40	0.10	2.00	1209	7.10	32.2		0.01
233	382-17	py	Py III	1	116.19	4	10b	957E-17R-1-3	0.10	9.50	0.02	0.10	0.90	0.04	0.30	141.4	45.4	3.00	2.60	0.40
234	385-20	py	Py IV	1	116.19	4	10b	957E-17R-1-3	0.10	0.80			4.20		0.70	2314	160.6	18.4	0.30	0.10
235	386-21	py	Py IV	1	116.19	4	10b	957E-17R-1-3		0.20			1.90		0.10	753.8	6.30	17.4		0.02
236	388-23	py	Py IV	1	116.19	4	10b	957E-17R-1-3		13.4		1.30	1.80	2.10	1.10	1578	27.6	7.80		1.30
237	389-24	py	Py I	1	116.19	4	10b	957E-17R-1-3				0.20			2.90	1823	10.1	179.9		
238	390-25	py	Py I	1	116.19	4	10b	957E-17R-1-3			0.04		5.70		1.10	960.4		93.3		
239	391-26	py	Py IV	1	116.19	4	10b	957E-17R-1-3	0.30	49.8			1.10		1.50	1026	12.3	34.5	3.30	0.50
240	393-28	py	Py IV	1	116.19	4	10b	957E-17R-1-3		20.5		0.40	4.30		0.40	917.2	5.10		0.20	0.10
241	394-29	py	Py III	1	116.19	4	10b	957E-17R-1-3	0.20	90.5			3.50	0.02	2.30	250.3		12.1		0.003
242	397-32	py	Py IV	1	116.19	4	10b	957E-17R-1-3					1.30		0.10	965.7		51.3		
243	398-33	py	Py IV	1	116.19	4	10b	957E-17R-1-3		2.50					0.10	204.5	3.90	21.7		0.01
244	400-35	py	Py I	1	116.19	4	10b	957E-17R-1-3		34.8		1.40		0.30	1.00	537.7		15.3	0.50	0.20
245	401-36	py	Py VI	1	116.19	4	10b	957E-17R-1-3		2.70					0.40	758.1		44.4		
246	402-37	py	Py V	4	34.3	0	3	957M-7R-1-1		152.5		6.00		8.10	2.00	2.6			0.40	0.02
247	403-38	py	Py V	4	34.3	0	3	957M-7R-1-1	0.20	7.90		1.70		0.10	0.05					0.002
248	405-40	py	Py VI	4	34.3	0	3	957M-7R-1-1	0.20	3.00	0.10	0.20		0.40	0.80	831.7		24.2		0.003
249	406-41	py	Py I	4	34.3	0	3	957M-7R-1-1		59.6		1.90		1.30	2.90	301.8	12.4	11.5		
250	409-44	py	Py I	4	34.3	0	3	957M-7R-1-1	0.10	1.10			1.30	0.03	0.40	519.2	5.00	22.9	0.10	0.10
251	410-45	py	Py VI	4	34.3	0	3	957M-7R-1-1	1.20	36.0		0.40		4.20	1.00	3.4			0.30	2.00
252	412-47	py	Py V	4	34.3	0	3	957M-7R-1-1		139.0	0.04	4.20		2.60	0.60	8.5			1.20	0.20
253	413-48	cpy	-	4	34.3	0	3	957M-7R-1-1	44.5						0.94				1.78	
254	414-49	py	Py V	4	34.3	0	3	957M-7R-1-1		23.7		1.50	3.20	12.5	0.70				0.30	0.04
255	415-50	py	Py I	4	34.3	0	3	957M-7R-1-1		3.50		0.10	0.60		0.10	955.5	8.20	30.4		0.002
256	417-52	py	Py IV	4	34.3	0	3	957M-7R-1-1		27.1		0.40		0.70	0.30	13.5				
257	418-53	py	Py I	4	34.3	0	3	957M-7R-1-1		52.1		1.10		4.90	6.30	472.5	21.9	21.4	2.20	0.50
258	421-56	cpy	-	4	34.3	0	3	957M-7R-1-1	45.7	2.26	0.22			0.23						
259	422-57	cpy	-	4	34.3	0	3	957M-7R-1-1	65.7	3.79				0.39	1.00				2.14	0.05
260	424-59	cpy	-	4	34.3	0	3	957M-7R-1-1	120.8					0.18	1.16		32.9			
261	425-60	py	Py IV	4	34.3	0	3	957M-7R-1-1								217.5	32.8	3.40		
262	426-61	py	Py IV	2	10.19	1	5	957A-3X-1-4	0.40	26.3		0.20		2.90	0.10				3.90	0.20
263	430-65	py	Py IV	2	10.19	1	5	957A-3X-1-4	0.60	301.3		0.50		39.8		1.10			2.50	
264	433-68	py	Py IV	2	10.19	1	5	957A-3X-1-4	1.40	72.6		8.10		6.70						0.03
265	434-69	sph	-	2	10.19	0	4	957A-3X-1-4		3.07		50.8		0.23					1.03	0.01
266	436-71	sph	-	2	10.19	0	4	957A-3X-1-4	0.49		0.39	12.7		0.09						0.01
267	437-72	py	Py IV	2	10.19	1	5	957A-3X-1-4	0.60	80.1	0.10	1.00		6.50					6.00	0.10
268	438-73	py	Py IV	4	38.51	3	10a	957M-8R-1-5		0.50				0.03	0.10	2.90	78.2		0.30	0.01
269	439-74	py	Py VI	4	38.51	3	10a	957M-8R-1-5	0.20				2.30			8.30				0.01
270	441-76	py	Py IV	4	38.51	3	10a	957M-8R-1-5		37.9		0.50		0.10	0.10	26.2	58.9		0.40	

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Fe	Cu	Zn	Pb	Au	Ag	As	Cd	Mn	Ga	Ge	In
271	442-77	py	Py I	4	38.51	3	10a	957M-8R-1-5		13.7	0.80	0.20					1.10			
272	445-80	py	Py IV	4	38.51	3	10a	957M-8R-1-5		3.60		0.20			4.00	0.50				
273	446-81	py	Py VI	4	38.51	3	10a	957M-8R-1-5		21.7	3.40	1.20			40.3		0.40			
274	448-83	cpy	-	4	38.51	1	5	957M-8R-1-5				0.51				8.47			25.2	0.64
275	449-84	cpy	-	4	38.51	1	5	957M-8R-1-5			29.2	1.92			13.2		2.67		31.4	9.72
276	450-85	py	Py I	1	37.31	2	7	957C-13N-1-4		4.20		0.10			41.4		0.20			
277	451-86	mc	-	1	37.31	2	7	957C-13N-1-4		372.6		1.05			14.8		0.69	0.33		
278	453-88	mc	-	1	37.31	2	7	957C-13N-1-4		11.8		0.87					0.95			
279	454-89	py	Py I	1	37.31	2	7	957C-13N-1-4		25.4		0.10	0.40		2.30					
280	457-92	py	Py V	1	37.31	2	7	957C-13N-1-4		52.3							1.00			
281	458-93	py	Py V	1	37.31	2	7	957C-13N-1-4		6.00		10.6			3.10		0.40		7.30	
282	460-95	py	Py VI	1	37.31	2	7	957C-13N-1-4		44.5		0.80			15.0		0.60			
283	461-96	mc	-	1	37.31	2	7	957C-13N-1-4		48.0		0.21			1.87	0.96				0.09
284	462-97	py	Py IV	1	63.58	3	10a	957E-6R-1-7		267.8		5.50			18.8	1.00			14.7	
285	463-98	cpy	-	1	63.58	3	10a	957E-6R-1-7			47.6	0.55	1.45	3.47			2.98	9.53		0.97
286	465-100	cpy	-	1	63.58	3	10a	957E-6R-1-7			65.4	0.31		3.13		4.08		5.37	58.3	1.43
287	466-101	py	Py IV	1	63.58	3	10a	957E-6R-1-7		195.3	543.7	96.4		0.60	119.1	2.90	2.80			
288	469-104	py	Py I	1	63.58	3	10a	957E-6R-1-7		206.7		75.1		0.90	33.7	1.80	6.70	1.40	5.80	0.10
289	470-105	py	Py V	1	63.58	3	10a	957E-6R-1-7		198.0	454.4	34.9			22.4	1.60	2.80		4.90	
290	472-107	py	Py IV	1	63.58	3	10a	957E-6R-1-7		315.2	26.9	7.00		0.90	7.20	1.00	3.70			
291	473-108	py	Py V	1	63.58	3	10a	957E-6R-1-7		314.3	8.10	71.6		8.00	76.1	0.90	1.80			
292	474-1	py	Py V	4	14.7	1	5	957M-3-1-11A		5.20	7.90	0.50		4.70	3.00		1.30	0.40	7.20	
293	475-2	py	Py V	4	14.7	1	5	957M-3-1-11A		6.80	8.70	0.50	0.70	5.00			2.70	0.30		0.10
294	477-4	mc	-	4	14.7	3	9	957M-3-1-11A		7.29	7.36	2.03		0.37			2.05	0.38		0.04
295	478-5	mc	-	4	14.7	3	9	957M-3-1-11A		114.6	1338	1006		175.5	245.6		12.7	0.98		
296	481-8	mc	-	4	14.7	3	9	957M-3-1-11A		8.39	9.35	51.5		0.42	30.0		5.23	0.69		
297	482-9	mc	-	4	14.7	3	9	957M-3-1-11A		191.4		25.9		1.39	17.9	8.53	1.06			
298	485-12	sph	-	4	14.7	3	9	957M-3-1-11A	43386	2124		224.5		148.8	59.0	1036	17.0	119.8	103.7	0.06
299	487-14	sph	-	4	14.7	3	9	957M-3-1-11A	12173	597.9		143.0		82.0	29.4	1041	18.4	150.2	52.6	
300	489-16	mc	-	4	14.7	3	9	957M-3-1-11A		5.35	7.64	73.1		0.58	23.0		0.66			
301	490-17	py	Py IV	4	14.7	1	5	957M-3-1-11A		10.6	7.40	28.7		2.10	85.2		1.50	0.20		
302	493-20	py	Py V	4	14.7	1	5	957M-3-1-11A		54.1	36.9	75.8		2.00	580.8		13.3			
303	494-21	mc	-	4	14.7	3	5	957M-3-1-11A		21.2	21.1	1.46		1.33	3.91		5.74			
304	496-23	sph	-	4	14.7	3	9	957M-3-1-11A	13588	1442		504.5	0.52	91.0	141.1	1025	20.9	306.0	326.1	10.7
305	497-24	py	Py IV	4	14.7	1	5	957M-3-1-11A		189.7	82.4	329.6		60.6	304.1		9.30		8.90	
306	498-25	py	Py IV	4	14.7	1	5	957M-3-1-11A		180.0	34.6	184.3	0.60	49.9	120.0		16.4			
307	499-26	sph	-	4	14.7	3	9	957M-3-1-11A	23133	1503		455.1	1.08	33.5	38.8	1552	40.8	34.0	116.8	0.03
308	501-28	cpy	-	4	14.7	3	9	957M-3-1-11A			1423	2.63		13.8		2.47		10.8		15.1
309	502-29	py	Py V	4	14.7	1	5	957M-3-1-11A		12.6		28.6	0.40	1.70	39.5	0.80	0.30			
310	505-32	mc	-	4	14.7	3	9	957M-3-1-11A		1.48	1.41	0.48	0.51	0.13	7.85		1.50			
311	506-33	mc	-	4	14.7	3	9	957M-3-1-11A		35.7		5.81		0.51	6.14		3.01			
312	508-35	cpy	-	4	14.7	3	9	957M-3-1-11A			1348	2.56		10.8	6.03	6.11		13.4	29.4	15.4
313	509-36	py	Py V	4	14.7	1	5	957M-3-1-11A		5.90		0.05			4.20		0.40			
314	510-37	py	Py IV	4	14.7	1	5	957M-3-1-11B		29.4					4.20		0.40		2.80	
315	511-38	py	Py IV	4	14.7	1	5	957M-3-1-11B		3.30	22.5	1.10	0.10	0.50	17.6		14.1	0.10	1.70	



Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Sn	Mo	W	Sb	Te	Tl	Bi	Co	Ni	Se	V	U
271	442-77	py	Py I	4	38.51	3	10a	957M-8R-1-5		0.20				0.02	0.60	13.6	211.6		1.30	0.20
272	445-80	py	Py IV	4	38.51	3	10a	957M-8R-1-5		0.30			1.80		0.04	17.9	83.2	7.40	0.20	0.01
273	446-81	py	Py VI	4	38.51	3	10a	957M-8R-1-5	0.20	12.0					1.40	27.9	6.60			
274	448-83	cpy	-	4	38.51	1	5	957M-8R-1-5	9.91		0.47		10.8		0.18					0.02
275	449-84	cpy	-	4	38.51	1	5	957M-8R-1-5	16.0						0.49		40.4			
276	450-85	py	Py I	1	37.31	2	7	957C-13N-1-4					1.00			299.5		12.6		0.002
277	451-86	mc	-	1	37.31	2	7	957C-13N-1-4		90.3		0.25		0.03	0.56	409.8		17.6	0.48	0.13
278	453-88	mc	-	1	37.31	2	7	957C-13N-1-4		28.0			2.39			50.9	78.3		0.21	0.65
279	454-89	py	Py I	1	37.31	2	7	957C-13N-1-4						0.03	0.10	371.2		23.6		
280	457-92	py	Py V	1	37.31	2	7	957C-13N-1-4							0.10	850.0	15.3	41.0		0.00
281	458-93	py	Py V	1	37.31	2	7	957C-13N-1-4		3.20				0.10		668.7		20.0		
282	460-95	py	Py VI	1	37.31	2	7	957C-13N-1-4		0.60				0.30		6.20	8.80			
283	461-96	mc	-	1	37.31	2	7	957C-13N-1-4		203.3			2.30		0.53	487.8		24.1		
284	462-97	py	Py IV	1	63.58	3	10a	957E-6R-1-7			0.10					62.3	16.2	26.2	0.30	
285	463-98	cpy	-	1	63.58	3	10a	957E-6R-1-7	8.34							251.1				
286	465-100	cpy	-	1	63.58	3	10a	957E-6R-1-7	1.29	14.6		0.66				115.6		32.4		
287	466-101	py	Py IV	1	63.58	3	10a	957E-6R-1-7		77.7		0.50		9.90	0.30	441.6			4.00	
288	469-104	py	Py I	1	63.58	3	10a	957E-6R-1-7		146.1	0.10	0.30		33.9		67.8	6.30	5.00	3.90	
289	470-105	py	Py V	1	63.58	3	10a	957E-6R-1-7		129.4				15.3		166.3	10.4		3.00	
290	472-107	py	Py IV	1	63.58	3	10a	957E-6R-1-7		77.9				19.8	0.10	61.4	9.20		1.60	
291	473-108	py	Py V	1	63.58	3	10a	957E-6R-1-7		16.6	0.10	1.10		1.50		43.7			1.10	
292	474-1	py	Py V	4	14.7	1	5	957M-3-1-11A		2.60				6.30					0.20	
293	475-2	py	Py V	4	14.7	1	5	957M-3-1-11A		9.70		0.20		4.50		0.90		19.6	0.30	
294	477-4	mc	-	4	14.7	3	9	957M-3-1-11A		0.96	0.09			2.68					0.53	0.003
295	478-5	mc	-	4	14.7	3	9	957M-3-1-11A		82.5		15.2		12.5					4.41	0.06
296	481-8	mc	-	4	14.7	3	9	957M-3-1-11A		110.1		2.70		6.51		23.4			0.34	
297	482-9	mc	-	4	14.7	3	9	957M-3-1-11A		5.23		1.12		0.86					4.79	0.11
298	485-12	sph	-	4	14.7	3	9	957M-3-1-11A		16.9		84.1		1.36			18.9		5.28	0.76
299	487-14	sph	-	4	14.7	3	9	957M-3-1-11A		5.48	0.11	52.9		0.03		0.29			0.67	0.15
300	489-16	mc	-	4	14.7	3	9	957M-3-1-11A		25.4		0.82		1.31		0.73	14.0		3.27	0.04
301	490-17	py	Py IV	4	14.7	1	5	957M-3-1-11A		51.7		0.90		3.80		31.2	6.30		1.50	0.10
302	493-20	py	Py V	4	14.7	1	5	957M-3-1-11A		145.9		214.4		10.1		8.10	5.60		0.30	
303	494-21	mc	-	4	14.7	3	5	957M-3-1-11A		20.0	0.04	0.80		3.65					1.48	0.07
304	496-23	sph	-	4	14.7	3	9	957M-3-1-11A		2.26		88.9		0.08		6.38				
305	497-24	py	Py IV	4	14.7	1	5	957M-3-1-11A		34.9	0.10	12.0		6.40			17.3	15.5		0.10
306	498-25	py	Py IV	4	14.7	1	5	957M-3-1-11A		52.5	0.04	17.4		8.00		0.80			0.30	0.05
307	499-26	sph	-	4	14.7	3	9	957M-3-1-11A	0.12	11.2		66.6		0.29	0.03				0.14	1.08
308	501-28	cpy	-	4	14.7	3	9	957M-3-1-11A	27.5								36.4		0.89	
309	502-29	py	Py V	4	14.7	1	5	957M-3-1-11A		0.50		2.60		0.30		8.70			0.40	
310	505-32	mc	-	4	14.7	3	9	957M-3-1-11A		4.71		0.10		6.07		0.43			2.00	0.01
311	506-33	mc	-	4	14.7	3	9	957M-3-1-11A		44.8		0.74		0.64		5.00			0.20	
312	508-35	cpy	-	4	14.7	3	9	957M-3-1-11A	28.9		0.17				0.21				0.89	0.01
313	509-36	py	Py V	4	14.7	1	5	957M-3-1-11A		1.30			1.40		0.10	1072	46.0	39.8	0.30	0.01
314	510-37	py	Py IV	4	14.7	1	5	957M-3-1-11B		0.90	0.04	0.10	4.50		0.02	1242	13.7	38.4		
315	511-38	py	Py IV	4	14.7	1	5	957M-3-1-11B		29.6		0.20	0.50	3.40	0.01	0.20	3.00		0.50	0.002

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Fe	Cu	Zn	Pb	Au	Ag	As	Cd	Mn	Ga	Ge	In
316	513-40	py	Py IV	4	14.7	1	5	957M-3-1-11B		0.80					2.20		0.60			
317	514-41	py	Py IV	4	14.7	1	5	957M-3-1-11B		13.6		0.20		0.30	6.60		0.70	0.40		
318	517-44	py	Py IV	4	14.7	1	5	957M-3-1-11B		195.1		24.3		1.20	110.8		0.40		9.80	
319	518-45	py	Py IV	4	14.7	1	5	957M-3-1-11B		159.3	50.6	46.8		6.60	40.1	0.40	1.80			
320	520-47	sph	-	4	14.7	3	9	957M-3-1-11B	21211	1285		4.77	0.43	4.71		990.4	32.6	193.8	30.4	34.5
321	522-49	cpy	-	1	32.35	2	8	957C-11N-2-1E			43.6	0.11		2.76		1.36	1.23	4.08		3.70
322	523-50	py	Py III	1	32.35	2	8	957C-11N-2-1E		2.70	1.10						0.60			0.02
323	525-52	mc	-	1	32.35	2	8	957C-11N-2-1E		15.4			0.44		1.02		0.34		3.21	
324	526-53	py	Py VI	1	32.35	2	8	957C-11N-2-1E		62.9	15.1	0.50			18.6		0.50			
325	529-56	py	Py V	1	32.35	2	8	957C-11N-2-1E		11.8	52.2	0.30					0.70		7.70	0.10
326	530-57	py	Py V	1	32.35	2	8	957C-11N-2-1E		5.70		0.50			7.50					
327	532-59	cpy	-	1	32.35	2	8	957C-11N-2-1E			38.8		0.98	2.80			0.85	3.93	5.63	2.94
328	533-60	cpy	-	1	32.35	2	8	957C-11N-2-1E			48.6			4.73			1.96	3.43		3.60
329	534-61	cpy	-	1	78	1	5	957E-9R-1-3A			69.6	0.26		2.92			4.91	3.75		2.55
330	535-62	cpy	-	1	78	1	5	957E-9R-1-3A			56.9			3.20			2.89	22.8	20.6	11.6
331	537-64	py	Py VI	1	78	3	10a	957E-9R-1-3A		48.9		3.50			24.8				2.70	
332	538-65	py	Py V	1	78	3	10a	957E-9R-1-3A		17.4		8.10		0.10	14.5		0.20		3.10	
333	541-68	py	Py V	1	78	3	10a	957E-9R-1-3A						0.10			0.40			
334	542-69	py	Py V	1	78	3	10a	957E-9R-1-3A		3.40		0.10					0.40		9.70	
335	544-71	py	Py V	1	78	3	10a	957E-9R-1-3A			1.70	2.90		0.20	40.2		1.20		8.60	
336	545-72	py	Py V	1	78	3	10a	957E-9R-1-3A		2.10	3.00	1.40	1.60		24.6	1.00	3.10	0.40		
337	546-73	py	Py IV	1	78	3	10a	957E-9R-1-3A		32.1	2.20	20.8		0.50	22.4	0.90		0.40		
338	547-74	py	Py IV	1	78	3	10a	957E-9R-1-3A		548.8	2.20	64.2		9.80	58.3		0.90			
339	549-76	py	Py IV	1	78	3	10a	957E-9R-1-3A		14.2	2.20	1.30		0.10	3.20			0.40		
340	550-77	py	Py V	1	78	3	10a	957E-9R-1-3A		146.3		6.20			42.2	1.10	0.60			
341	553-80	py	Py V	1	78	3	10a	957E-9R-1-3A		24.2	99.3	18.8	1.90	11.6	27.3		1923			0.10
342	554-81	py	Py IV	1	78	3	10a	957E-9R-1-3A		9.30	64.0	7.60		0.50	10.7		19.2			0.04
343	556-83	py	Py V	1	78	3	10a	957E-9R-1-3A		127.6	60.4	31.5		1.30	35.6		14.9			
344	557-84	py	Py VI	1	78	3	10a	957E-9R-1-3A		52.2	4.00	29.5	0.60		37.0		1.30			
345	558-85	py	Py I	1	15.39	2	7	957C-5N-1-6		19.9					4.00		0.30			
346	559-86	py	Py IV	1	15.39	2	7	957C-5N-1-6		170.4	3.10	0.05			41.5	0.40	0.60		4.90	
347	561-88	py	Py V	1	15.39	2	7	957C-5N-1-6		99.6	2.50	28.2		0.30	56.6		0.80			
348	562-89	py	Py V	1	15.39	2	7	957C-5N-1-6		259.0	3.00			0.20	40.3		1.50			0.10
349	566-93	py	Py IV	1	15.39	2	7	957C-5N-1-6		6.50	2.00	17.4		0.10	5.60		0.80			
350	568-95	py	Py I	1	15.39	2	7	957C-5N-1-6		36.6			0.90		14.2		0.50	0.20	7.40	
351	571-98	py	Py III	1	15.39	2	7	957C-5N-1-6		143.7				0.30	80.6		2.40	0.80		
352	573-100	py	Py III	1	15.39	2	7	957C-5N-1-6		213.7	5.00	14.1		0.40	41.6					
353	574-101	py	Py V	1	15.39	2	7	957C-5N-1-6		44.0		3.30			40.1					
354	577-104	py	Py VI	1	15.39	2	7	957C-5N-1-6		269.3	13.0	20.2			35.9		1.70			
355	578-105	py	Py V	1	15.39	2	7	957C-5N-1-6		658.0				0.30	41.9	1.20	8.00			
356	580-107	py	Py I	1	15.39	2	7	957C-5N-1-6		168.2	2.60	2.80			16.4				8.70	0.10
357	581-108	py	Py IV	1	15.39	2	7	957C-5N-1-6		243.1	1.40	1.00	0.60	0.70	39.7		9.00			

Table C1: Individual trace element LA-ICP-MS analyses for sulfides from the TAG deposit (data in ppm)

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No.	Sample ID	Mineral	Pyrite Type	TAG area	mbsf	Min. Zone	Min. Type	Section	Sn	Mo	W	Sb	Te	Tl	Bi	Co	Ni	Se	V	U
316	513-40	py	Py IV	4	14.7	1	5	957M-3-1-11B	0.20				1.00			116.0	60.8	12.4	0.30	0.01
317	514-41	py	Py IV	4	14.7	1	5	957M-3-1-11B		12.3					0.10	238.4		21.9	0.20	
318	517-44	py	Py IV	4	14.7	1	5	957M-3-1-11B		21.3		2.20		0.30	0.10	240.5			0.30	0.10
319	518-45	py	Py IV	4	14.7	1	5	957M-3-1-11B	0.20	14.0		2.00	0.70	1.00	0.60	221.8	7.30		0.30	0.04
320	520-47	sph	-	4	14.7	3	9	957M-3-1-11B	6.82	19.3		21.2	1.77	0.01		9.24	8.41		0.52	
321	522-49	cpy	-	1	32.35	2	8	957C-11N-2-1E	28.3							37.8		16.1	0.20	
322	523-50	py	Py III	1	32.35	2	8	957C-11N-2-1E	0.10							603.5		52.9		
323	525-52	mc	-	1	32.35	2	8	957C-11N-2-1E							0.09	671.9		81.9		0.002
324	526-53	py	Py VI	1	32.35	2	8	957C-11N-2-1E		2.20		0.30		0.10	0.03	142.5	9.00		0.20	
325	529-56	py	Py V	1	32.35	2	8	957C-11N-2-1E		0.80	0.10	0.20				57.0		22.1	0.30	
326	530-57	py	Py V	1	32.35	2	8	957C-11N-2-1E				0.20	1.50		0.10	183.0				
327	532-59	cpy	-	1	32.35	2	8	957C-11N-2-1E	87.9			0.15				9.40				
328	533-60	cpy	-	1	32.35	2	8	957C-11N-2-1E	13.3							3.26			0.87	
329	534-61	cpy	-	1	78	1	5	957E-9R-1-3A	44.7	1.31						117.5			0.61	
330	535-62	cpy	-	1	78	1	5	957E-9R-1-3A	2.10	2.94						112.2				
331	537-64	py	Py VI	1	78	3	10a	957E-9R-1-3A	0.30	21.4		0.30	1.10	0.10	0.10	420.3	4.30	9.60	0.10	
332	538-65	py	Py V	1	78	3	10a	957E-9R-1-3A		0.90		0.30		0.10		418.6	22.4	28.7		
333	541-68	py	Py V	1	78	3	10a	957E-9R-1-3A				0.10	9.80			817.3	41.6	43.3		
334	542-69	py	Py V	1	78	3	10a	957E-9R-1-3A								975.5	48.7	13.3		0.01
335	544-71	py	Py V	1	78	3	10a	957E-9R-1-3A		78.5			1.50	2.50						0.03
336	545-72	py	Py V	1	78	3	10a	957E-9R-1-3A		136.5	0.10			4.10	0.10				0.40	0.10
337	546-73	py	Py IV	1	78	3	10a	957E-9R-1-3A		4.30		0.30	1.80	0.30	0.20	1081	62.7	62.9	0.20	
338	547-74	py	Py IV	1	78	3	10a	957E-9R-1-3A		63.6		0.60	2.70	3.00		32.8		17.9	0.40	0.03
339	549-76	py	Py IV	1	78	3	10a	957E-9R-1-3A		0.80					0.03	33.7				0.10
340	550-77	py	Py V	1	78	3	10a	957E-9R-1-3A		14.6		0.20		0.30		49.6		12.7		0.01
341	553-80	py	Py V	1	78	3	10a	957E-9R-1-3A			0.10			25.1					1.00	0.02
342	554-81	py	Py IV	1	78	3	10a	957E-9R-1-3A		8.40	0.04			0.40		207.5				
343	556-83	py	Py V	1	78	3	10a	957E-9R-1-3A		71.3		0.40		3.00			18.3			2.10
344	557-84	py	Py VI	1	78	3	10a	957E-9R-1-3A	0.20	12.2				0.70		2.50				0.03
345	558-85	py	Py I	1	15.39	2	7	957C-5N-1-6	0.20	0.30	0.03			0.02	0.04	190.5		14.3		
346	559-86	py	Py IV	1	15.39	2	7	957C-5N-1-6				0.10			0.05	23.8		8.5		
347	561-88	py	Py V	1	15.39	2	7	957C-5N-1-6		2.00	0.05	2.30		0.10		216.8				
348	562-89	py	Py V	1	15.39	2	7	957C-5N-1-6		0.80			1.80	1.50						
349	566-93	py	Py IV	1	15.39	2	7	957C-5N-1-6			0.10			0.04	0.04	1018		51.9		0.01
350	568-95	py	Py I	1	15.39	2	7	957C-5N-1-6		5.30				0.03		253.2	28.6	12.7		
351	571-98	py	Py III	1	15.39	2	7	957C-5N-1-6					1.60	0.90	0.10					
352	573-100	py	Py III	1	15.39	2	7	957C-5N-1-6	0.40	25.8		1.90		0.60	0.10	129.3	12.4			0.03
353	574-101	py	Py V	1	15.39	2	7	957C-5N-1-6		4.40						44.0			0.20	0.60
354	577-104	py	Py VI	1	15.39	2	7	957C-5N-1-6		22.9				1.20	0.10	42.8			0.60	0.10
355	578-105	py	Py V	1	15.39	2	7	957C-5N-1-6				0.50		0.80		3.80			0.50	0.02
356	580-107	py	Py I	1	15.39	2	7	957C-5N-1-6		5.90				0.10		75.1				
357	581-108	py	Py IV	1	15.39	2	7	957C-5N-1-6		1.50		0.20	2.00	0.80		12.9			0.10	0.30

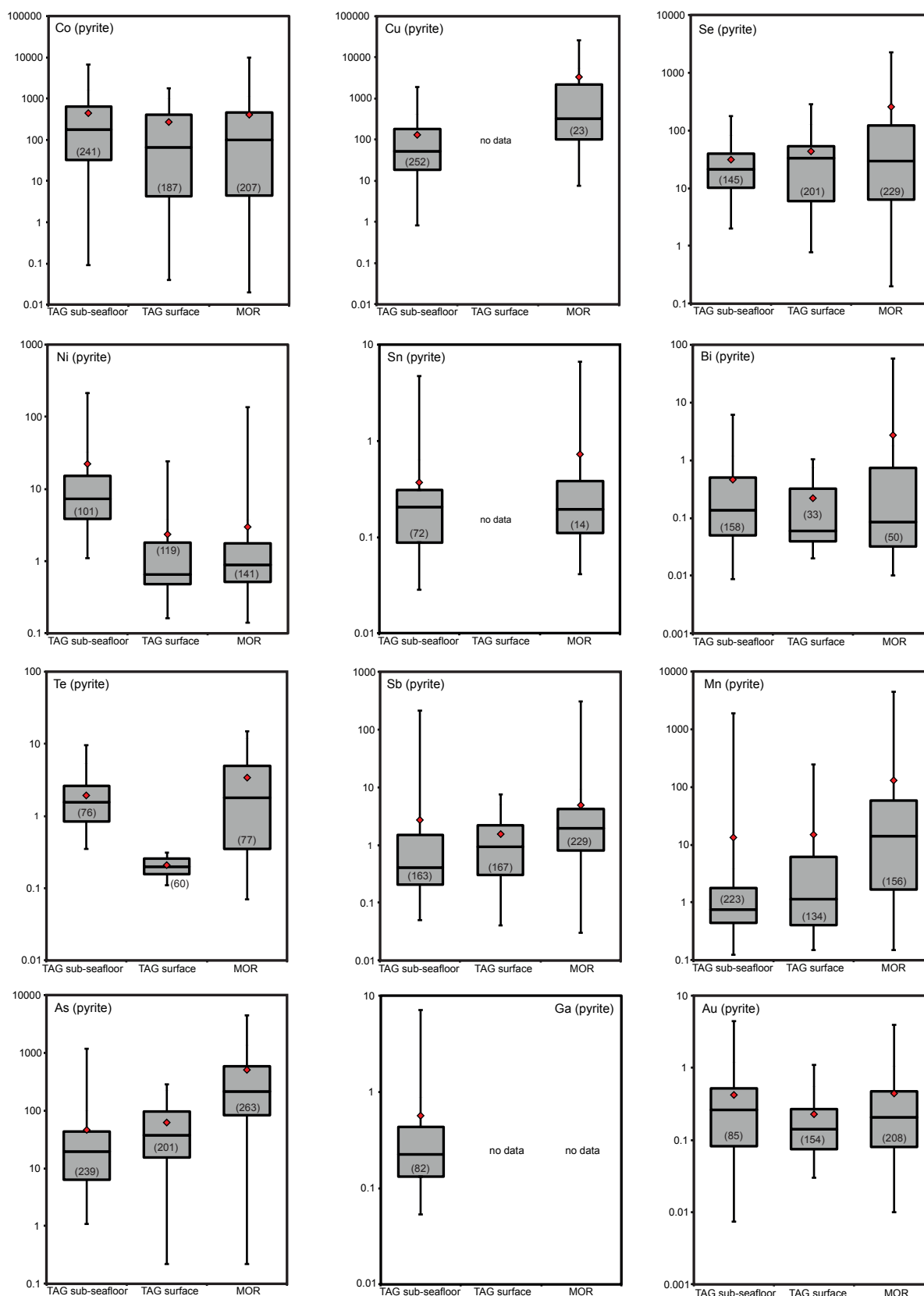
Complete trace element dataset of LA-ICP-MS analyses of selected minerals in ODP Leg 158 drill cores from the TAG Hydrothermal Mound. Sample ID, mineral phases, mineralization type, and location in the deposit are indicated. Blanks indicate below detection limit or not detected. Sample ID is an internal analytical ID.

**Table D1. Calculated proportions of trace elements in each pyrite type as displayed in Figure 15.**

Pyrite type	Modal abundance %	Co	Se	Ni	Zn	Pb	Au	Ag	Cd	Ga	Ge	In	Sn	Bi	As	Mo	Sb	Cu	Tl	Te	Mn	W	V	U	Total trace elements	% total trace elements
I	1	1.0	0.6	1.1	0.1	0.2	0.3	0.2	0.8	0.3	0.7	0.8	1.7	1.1	0.3	0.3	0.4	0.6	0.1	0.4	0.0	0.8	0.4	0.2	12.6	0.5
II	4	0.2	1.5	1.4	13.8	9.9	3.5	5.4	8.4	6.1	6.8	4.7	-	1.5	3.2	14.1	2.2	2.5	19.7	-	8.1	4.8	16.2	2.5	136.3	5.9
III	31	39.1	41.3	17.6	6.2	25.3	25.3	12.9	14.3	48.9	26.9	28.0	19.6	44.7	36.1	26.5	10.4	27.7	11.6	28.1	3.4	39.4	24.8	39.0	597.2	26.0
IV	43	43.9	38.5	65.2	46.5	34.2	34.7	59.9	36.6	19.2	41.7	26.4	59.8	27.4	31.8	37.0	29.9	46.7	41.5	42.3	17.7	36.8	39.0	43.3	900.0	39.1
V	14	8.9	13.3	11.8	27.6	24.0	18.1	14.9	13.8	7.9	18.3	9.7	10.8	16.0	16.0	18.3	52.7	15.7	23.2	22.1	70.1	11.0	11.9	6.6	442.5	19.2
VI	7	7.0	4.8	2.8	5.8	6.4	18.1	6.8	26.1	17.6	5.6	30.4	8.1	9.4	12.5	3.8	4.4	6.8	4.0	7.1	0.7	7.2	7.7	8.2	211.4	9.2
	Sum	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2300.0	100.0

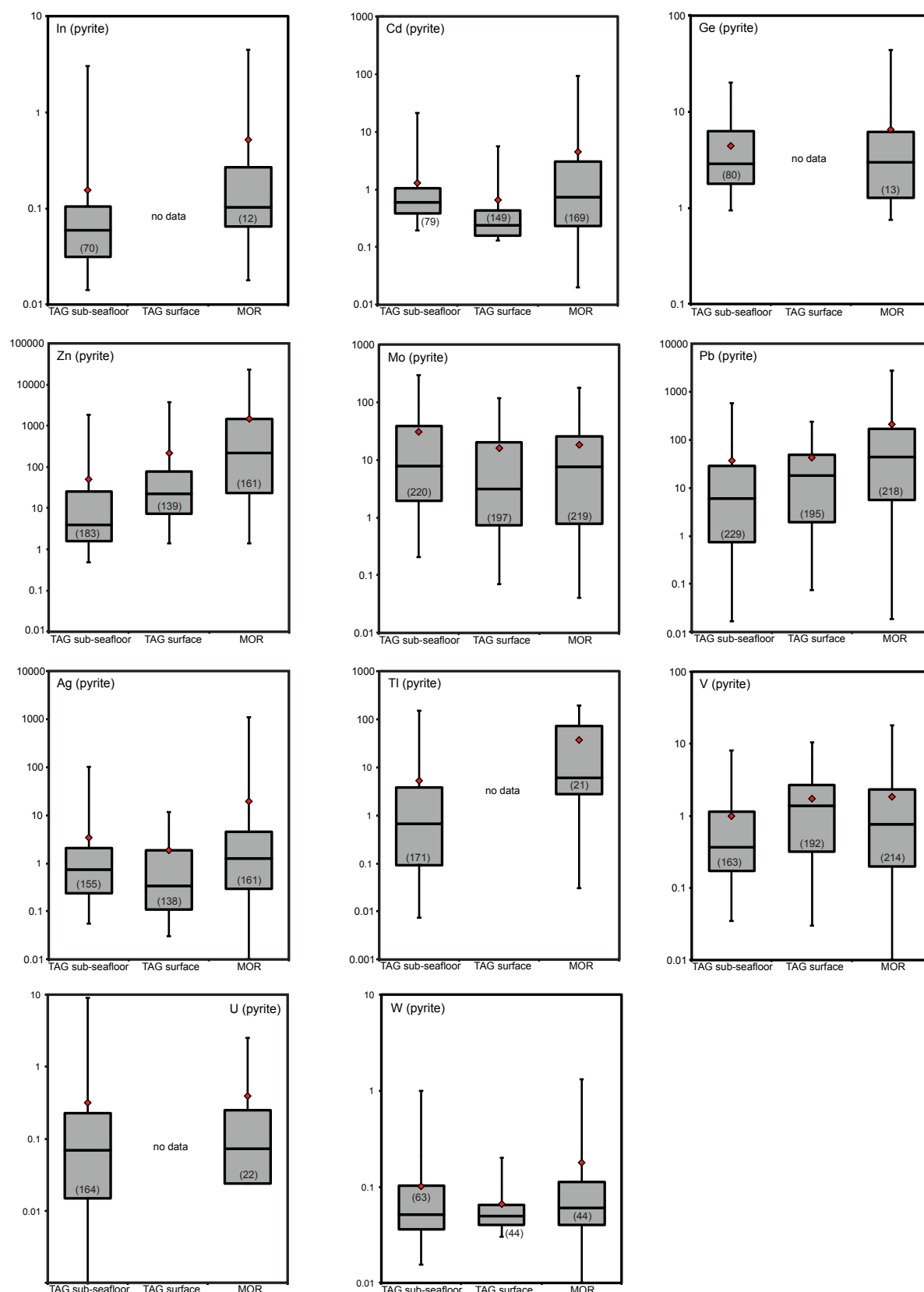
Calculated proportions of trace elements in each pyrite type based on average trace element contents of pyrite (Table 4) and modal abundances of each pyrite type estimated from petrography.

**Figure A1: Box and whisker plots comparing variations in TAG pyrite LA-ICP-MS trace element concentrations from TAG sub-seafloor samples (this study), TAG surface pyrite samples, and other MOR basalt-hosted massive sulfide deposits. Data is in ppm.**



Boxes show the interquartile range, the median is displayed as an internal line, and whiskers show the entire data range. Average values are shown by a red diamond. The number of analyses are indicated in parentheses. The TAG surface LA-ICP-MS data for pyrite sand is from Keith et al. (2016). Basalt-hosted MOR LA-ICP-MS data are from Melekestseva et al. (2012, 2014, 2017), Wohlgemuth-Ueberwasser et al. (2015), Keith et al. (2016), and Wang et al. (2017). Basalt-hosted MOR sample sites compiled here are: Turtle Pits, Comfortless Cove, TAG, Logatchev-1, Semenov-2, Semenov-4 (all Mid-Atlantic Ridge), Wocan-1 and Wocan-2 (Carlsberg Ridge), and Meso Zone (Central Indian Ridge).

**Figure A1: Box and whisker plots comparing variations in TAG pyrite LA-ICP-MS trace element concentrations from TAG sub-seafloor samples (this study), TAG surface pyrite samples, and other MOR basalt-hosted massive sulfide deposits. Data is in ppm.**



Boxes show the interquartile range, the median is displayed as an internal line, and whiskers show the entire data range. Average values are shown by a red diamond. The number of analyses are indicated in parentheses. The TAG surface LA-ICP-MS data for pyrite sand is from Keith et al. (2016). Basalt-hosted MOR LA-ICP-MS data are from Melekestseva et al. (2012, 2014, 2017), Wohlgemuth-Ueberwasser et al. (2015), Keith et al. (2016), and Wang et al. (2017). Basalt-hosted MOR sample sites compiled here are: Turtle Pits, Comfortless Cove, TAG, Logatchev-1, Semenov-2, Semenov-4 (all Mid-Atlantic Ridge), Wocan-1 and Wocan-2 (Carlsberg Ridge), and Meso Zone (Central Indian Ridge).